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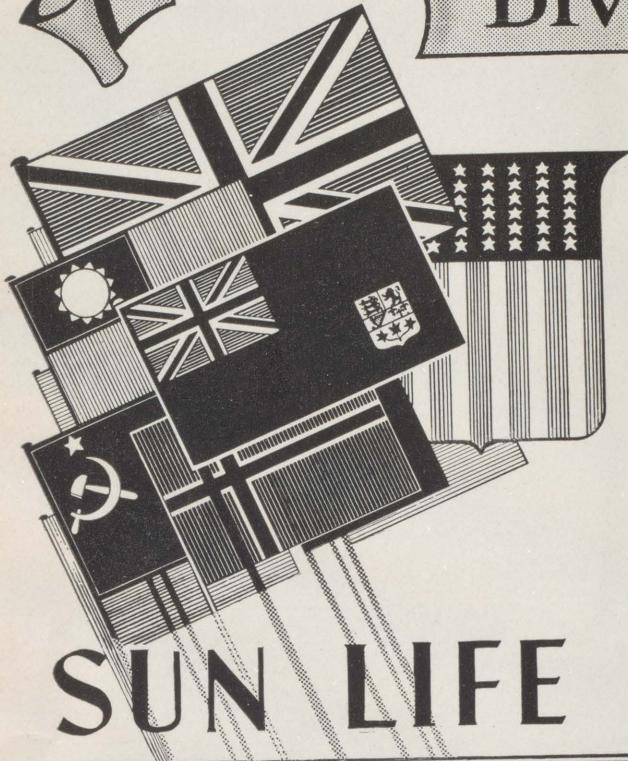


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EDITORIAL COMMENT

Farm Plans for 1943

News of the month, as far as the farmers of Quebec are concerned, is the forming of a Provincial Committee of Intensive Production to put into practice the programmes which will be necessary to reach the objectives for farm production set for this province at the Dominion-Provincial Conference recently held at Ottawa.

In the Government section of this issue will be found a statement showing exactly how much of each of the principal crops must be grown in Quebec this year. Except in cheese and mixed grain, increases are asked for in every commodity. And it is emphasized that these quantities, high as they may appear in some cases, are the very least that must be produced. It is realized that we may not be favoured with such ideal growing conditions as obtained in 1942: labour will be as scarce as ever in all probability, and there are many other factors which may combine to place obstacles in the way of our farmers. But our governments, both at Quebec and Ottawa, are leaving nothing undone to help and are counting on our farmers to keep the supplies coming forward for our armed forces, our allies and the civilian population.

District meetings will be held in the very near future in every community to explain the programme and to emphasize the importance of getting this increased production. Leaflets and bulletins with suggestions for increasing production in every crop are being printed and will be distributed to every farmer in Quebec in time for him to put their recommendations into effect this season. With everyone working together in the common effort, we will come out on top.

The Founder of Macdonald College

Though derived from two of the leading families of Prince Edward Island — the Catholic Macdonalds and the Protestant Brechers — Sir William Macdonald was absolutely a self-made man. A quarrel with his father, the Hon. Donald McDonald, resulted in his education being interrupted at the age of sixteen and in his learning, as a poorly paid counting-house clerk in Boston, those habits of extreme personal economy which characterized his later life.

In or about 1852, the year in which he attained his majority, the enterprising youth joined his second brother, four years his senior, in Montreal, where they operated profitably, first as oil merchants, then as commission merchants until 1859, when the tobacco business, in which the remainder of William's life was to be spent, was established.

The traditional Scottish appreciation of education was strong in the Glenaladale family. In 1881 William Macdonald donated \$25,000 as an endowment for ten scholarships in McGill University and in succeeding years made contributions of laboratory fittings, apparatus and museum collections to the science departments. In 1890 the scale of his gifts to the University was greatly augmented, the Faculty of Law being endowed in the sum of \$150,000 and buildings being undertaken for physics and engineering.

(Please turn to page 32)



AGRICULTURE

Articles on problems of the farm

Fertilizers Fight for Freedom

by L. C. Raymond

As this war progresses, the shortages and restrictions which develop, constantly remind us of the interrelated nature of world trade and supply in one commodity after another. The more prominent ones such as rubber, oil, coffee and sugar are by now well known. That fertilizers also belong in a similar category and that they hold such a direct relation to food supply is, perhaps, not as fully appreciated as the facts warrant. Those persons charged with the provision and maintenance of food supplies for the Allied Nations are, however, fully aware of the contribution that can be made by commercial fertilizers and are taking care that the available stocks are being used as efficiently as possible. The allocation of all supplies under Allied control has been placed under the direction of the Combined Food Board, located in Washington. This board represents a gigantic pool of all food or food producing commodities. All available fertilizer stocks are listed and demands for supplies must be cleared through this body.

Some Problems of the Combined Food Board

A multitude of data must be given careful analysis before assigning the fertilizers where they will do the most good. Shortages exist—fortunately not as great as in the last war when potash was in very short supply—and the material available must be placed where it will produce the most food where that food is urgently needed.

Britain is making an almost superhuman effort to grow more food for her greatly enlarged population. Apart from increased acreage, additional production is largely dependent on fertilizer supplies. It might at first appear more economical to ship more of our bulky surpluses, such as wheat, rather than attempting increased production in Britain, but this immediately runs into the bottleneck of shipping space. British agricultural authorities estimate that one ton of fertilizer will, in general, produce three tons increase in food stuffs, and hence the Board has decided to supply Britain as liberally as possible with the highest grade of fertilizer obtainable—the more concentrated the fertilizer again the less shipping space required.

Another section making heavy demands on fertilizer stocks is the Middle East. Countries in that area that are sympathetic to the Allied cause not only have a large population to the productive land, but have now, and likely will have for some time a large resident military group which must be fed. The more fertilizers available the more food can be grown and consequently the more shipping space for actual war weapons.



Weighing fertilizer for immediate application in an Eastern Townships pasture, near North Hatley.

To add to the other troubles of the Board, the general scene is rapidly and repeatedly changing. As just one case in point, consider the North African situation. This area is one of the recognized sources of high-grade phosphorous. Suddenly it becomes a potential source of this, probably the most widely needed fertilizer material. Doubtless any disturbance that this new supply may make in previously made plans will be tempered with the comforting thought that Herr Hitler will be shut off from its use and it was a source that the Axis depended on in no small part.

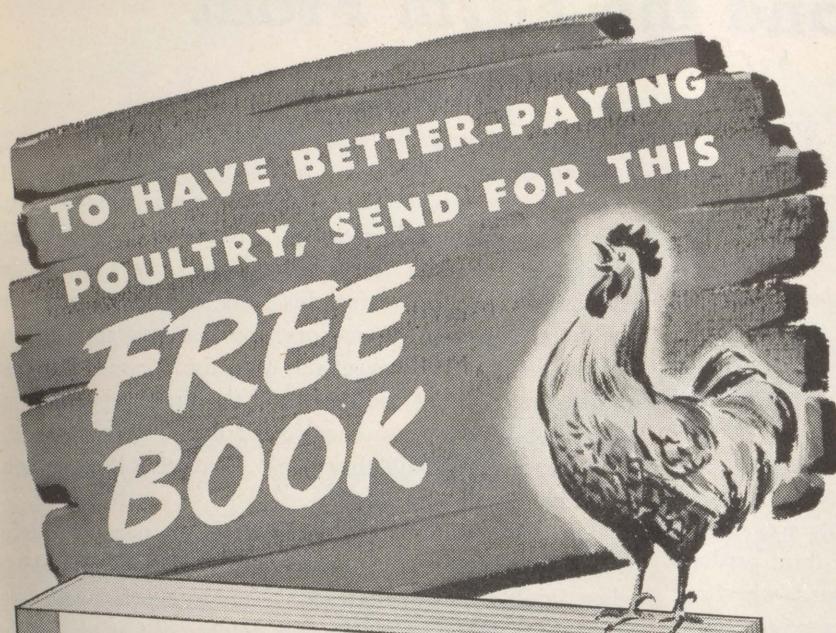
The exceptionally heavy demand of certain world countries is not by any means the only difficulty presented. Labour—of which considerable is required—is short; rail transportation—an important factor with such bulky material—is taxed to the utmost and as a result all countries are faced with some modification (in some cases the entire exclusion) of the grades formerly sold.

The Canadian Outlook

In common with other countries concerned, Canada has its fertilizer representative on the Combined Food Board in the person of Mr. Grant S. Peart, who is in charge of the Fertilizers Administration at Ottawa. Much credit is due him for the efficient way in which he has approached the whole problem. Canada is getting her fair share of the existing stocks. There is not likely to be any real shortage for absolute needs.

After a careful review of fertilizer usage, and after assessing the combined plant capacities of the fertilizer manufacturers, the Fertilizers Administration asked for the appointment of an agronomic committee representing the

(Continued on page 18)



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Labour and the Farm Front

by G. V. Haythorne



pool, which grew up during the depression years, had its origin partly in the flow of unemployed persons from urban industries and partly in the economic restrictions on the usual exodus of workers from the farms. Not only was there a surplus number of workers but supplies of farm products existed in market depressing quantities. In Canada wheat and cheese were the outstanding examples: others existed in the United States. Under these conditions and especially when the country was faced with the necessity of getting large numbers of men into the fighting forces quickly and of providing them with guns, tanks, ships and planes there was a natural tendency to take food production for granted.

As the war progressed this situation changed significantly. The call for carpenters, stevedores and munitions workers, accompanied by offers of high wages, met with a ready response from farm workers. A simultaneous appeal for men to fill the expanding ranks of all three services met the willing ears of many farm youth eager to serve their country and, for not a few, eager also to increase their meagre earnings. Over 250,000 workers or approximately one out of every five members of the farm working force, it is estimated, left the farms during the second and third war years.

During the same period food requirements both at home and abroad greatly expanded. The reverses of the war in the spring of 1940, resulting in the removal of Danish exports of bacon to the British Isles, brought a greater dependence on Canadian supplies. The growing demand was particularly for food with high nutritive value. Farmers were urged to produce more butter, cheese, eggs and bacon. Meanwhile an appeal was made for a larger wool crop. This emphasis on stock raising, stimulated by special subsidies, brought a shift in many areas from straight grain growing to mixed farming. In turn this shift gave rise to greater manpower requirements per farm. Extra workers formerly employed during seasonal periods only were now needed, on an increasing number of farms, for year round operations. This greatly increased output of farm products placed a heavy burden on those remaining in agriculture; a burden which was made all the greater when most of those left on the farm were older, less virile workers.

When war broke out in September 1939, it will be remembered that there was a large reservoir of workers in the rural districts. This manpower

Steps Taken To Meet Situation

Except to assist in meeting peak labour needs as they have developed, little direct responsibility for ensuring an adequate farm working force has been needed until recently by provincial or federal authorities. The plentiful supply of labour on farms during the early years of the war helped to account for this situation. The absence of an overall selective service organization was another important factor. In any event not until the pressure for food requirements on the one hand and the drain of manpower from the farms on the other forced the problems of farm labour to the fore did they begin to receive broader consideration.

One of the first recognitions of the need for safeguarding manpower in agriculture came early in 1941 when single males in the callable age categories were conscripted for military service in the defence of Canada for the duration of the war. At this time persons essential for agriculture were granted postponement of service at the discretion of Mobilization Boards. Later, in March 1942, the regulations required the Boards to grant postponement until further notice to a person, wholly or mainly engaged in agriculture, requesting postponement, unless the Board could establish that he was not essential to farming. Concurrently another federal Order-in-Council sought to stabilize employment in agriculture by prohibiting essential workers from leaving agriculture except under certain conditions. A farmer could still enlist in the armed forces for overseas service and he could accept seasonal employment in lumbering, logging, forestry, fishing or trapping. But he could not accept other employment unless he had first obtained special permission from a Selective Service official.

These restrictions on workers leaving agriculture remain in effect with certain amendments. On September 1, 1942 it was provided that any person employed in agriculture, if he were not needed there could work elsewhere for thirty consecutive days without contacting a local employment office and obtaining the usual permit. On January 19, 1943 this provision was altered to enable farmers to work a total of sixty days throughout any one calendar year without a permit outside cities and towns of more than 5,000 population. No farmers or farm workers



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See Page 21

can now be employed, even temporarily, inside such urban centres without first obtaining a permit to seek employment.

During the fall of 1942 the Department of Labour made a special appeal to farmers and farm helpers, not fully occupied during the winter months, to engage in logging and mining operations. Those who fall within the military age categories have been assured that acceptance of such work will not interfere with their right to ask for postponement, provided they return to agriculture in the spring. Those engaged in the recruiting of labour for these seasonally complementary industries are giving first attention to the needs of farmers. Whenever workers are needed in farming districts persons available in other districts are directed there before any are sent to logging camps or mines. While some objections have been raised to this recruitment of labour from farms, the appeal is recognized as an essential one.

More positive attempt to meet the seasonal needs of labour in agriculture have been made by the provincial governments. Outstanding in this respect is the work of the Ontario Department of Agriculture through its specially organized Farm Service Force. During the past summer and fall this organization placed over 50,000 high school youth, under-employed men and women, store clerks and other townspeople, principally in harvesting fruit, vegetable and grain crops. Federal assistance was given to this as well as to somewhat similar projects in certain other provinces. In addition the Dominion Department of Labour organized a special harvest excursion to Western Canada to meet an emergency labour situation on the prairie wheat fields.

Outlook for the Current Year

With the large reservoir of farm labour gone the increased farm production goals set for 1943 will not be easily met. The "allocation of labour to agriculture" under

Selective Service regulations, has helped retain labour on the farms but substantial withdrawals have nevertheless continued.

Aside from the present seasonal movement of workers from agriculture to logging and mining the main loss of labour continues to be to the armed forces. A portion of this movement, especially of those who volunteer, will go on but the time has come for a more thorough-going application of the principles of Selective Service to agriculture. Steps are now being taken to clarify the position of farm workers in regard to military service. This clarification should remove much of the past confusion and should result in the retention in agriculture of essential farm workers. It can be added that the Employment and Selective Service offices are aware of the importance of restricting the issuance of permits to many farmers to take employment outside agriculture.

Besides checking the withdrawals of essential workers the realization of the 1943 farm production goals is dependent on the best use of existing manpower in agriculture. Today many persons are working either on farms inefficiently operated or on farms with poor natural conditions. If these persons were mobilized for work on essential farms their efforts would contribute much to the success of the farm production program.

In this connection it is of interest to note that the transferring of workers from less to more productive farms and the provision of some financial assistance to encourage such movements are two important features of the farm labour program in the United States.

A classification of farms on the basis of their essentiality would mean applying to agriculture a procedure that is now being successfully applied to other industries. There would be complications in carrying it out but with the close

(Continued on page 12)



Agricultural Price Control and Subsidies

by F. Shefrin

This war has brought about many changes in the Canadian economy as a whole and in Canadian agriculture in particular. Much of the present agricultural policy has been and is designed to bring about increased production of the desired products as the need arises. Briefly, Canadian agricultural policy based upon British and domestic demands calls for an expansion in the production of livestock and livestock products; more meats, dairy products and eggs are wanted. In turn the restricted market for wheat has resulted in an acreage reduction program. In order to ensure these changes, the Dominion Government has implemented the program by means of subsidies and bonuses. The feed freight assistance policy and the fertilizer subventions on the one hand and the cash subsidies for increased butter, cheese, hog and egg production, and for reduced wheat acreage and increased coarse grain acreages on the other hand are aimed at ensuring production in sufficient quantity to help meet the demand of the United Nations and satisfy the needs of the domestic market.

At the same time, measures have been taken to maintain economic stability through such means as the establishment of price ceilings. This policy is promoted by war conditions and is designed to prevent uncontrolled inflation and at the same time ensure adequate agricultural production.

With regard to the general aim of the price control program as it concerns the farmer, Prime Minister King on October 11, 1941, said: "The policy touches the farmer in two ways. The principle of the price ceiling will be applied to agricultural prices while at the same time total agricultural income will be supported where necessary by Government action."

Under the price ceiling order, no person may sell goods or supply services to consumers at a price or a rate higher than the maximum price or rate at which he made sales of such goods or services during the basic four-week-period between September 15 and October 11, 1941. The price ceiling order does not apply to certain products when sold by the primary producers to dealers, processors and manufacturers. The Wartime Prices and Trade Board was charged with maintaining the price ceiling on goods and services.

Thus from the very beginning the Wartime Prices and Trade Board recognized that the maximum prices of most farm products could not be based upon the selling prices of individual farmers. Accordingly, farmers' individual ceiling prices were replaced either by a market ceiling for the commodity, or by a ceiling over the manufactured or processed product.

The establishment of a program of price control has in turn led to a widespread use of subsidies. The need for subsidies under an over-all price control policy is due to the fact that some costs cannot be controlled or absorbed by the parties concerned. At the same time, they are being employed not merely to hold the prices down but to maintain production. In brief, subsidies can be regarded as an instrument of primary significance in the modern technique of price control.

Holding down prices by means of subsidies paid out of public funds has been considered desirable as it makes for a more equitable distribution of essential commodities made scarce and more costly by wartime demands. When prices are allowed to rise, consumers' goods in short supply go to those whose incomes are greatest.

The use of subsidies as part of the price control technique in preventing inflationary effects may be explained in the following manner. In simple terms inflation is due to an excess of spending power in the hands of consumers at a time when the supply of goods and services available is limited. Under such circumstances prices will rise very rapidly. It is this very condition that a price control policy seeks to prevent. Thus if subsidies are used to prevent rising prices on account of increased costs and in so far as the subsidy payment is smaller than the amount of the increase in price which might have occurred, there is likely to be a lesser inflationary effect.

During the past year it is estimated that the Dominion Government subsidies and bonuses to agriculture amounted to \$90,000,000 and for the war period to date the figure is close to \$140,000,000. Cash farm income has accordingly been augmented.

The general principles of the Canadian subsidy program may be summarized as follows:

- (1) Subsidies are paid for the purpose of keeping down the cost of living. They are paid to farmers for the purpose of enabling them to continue producing essential commodities and at the same time hold down or reduce their prices in the face of higher costs.
- (2) Subsidies are paid to maintain supplies of essential commodities only.

In turn the general motives underlying the Canadian price fixing policy are to prevent run-away prices for the sake of both economy and public morale and to stimulate production of essential products.

(A second section of this article will appear in the March Issue)

Improve the Quality of Your Cattle Hides

by W. E. Whitehead

The production of commodities and the conservation of these commodities are two things we are hearing a lot about at the present time. The better the product we are able to produce, the better it will conform to the standard of requirement, in addition to our receiving more satisfactory financial returns.

Of these commodities one is leather, much of which is produced from the hides of cattle. One of the chief defects found in this kind of leather is caused by the grubs of an insect known as a warble fly which puncture holes in the hide, resulting in a decrease of quality; a hide having five or more punctures is a second grade product. Since it is the most valuable part of the leather that is affected, the losses are frequently very high.

A second kind of loss, more difficult to estimate, also results from the attacks of the warble fly. It is the fright and worry caused the animals during adult fly activity in the summer. The flies deposit their eggs upon the cattle and although this causes no pain, their presence results in the animals becoming panicky and they gallop madly around the pasture with their tails in the air in an effort to rid themselves of the pests. This is referred to as "gadding" and it is responsible for a reduction in the milk yield, loss of flesh in beef animals, besides often occasioning physical injury.

During this time of the year, the insect is in the grub stage within the bodies of cattle. On hatching from eggs laid last summer upon the hairs of the legs and lower parts of the body, the grubs penetrated through the animal's skin, gradually worked their way through the tissues of the body and at the present time may be found in their final resting place beneath the skin of the animal's back. In this position, they bore a small breathing hole through the skin, become enclosed in cysts until full-grown, and the familiar warble lumps gradually develop which indicate the presence of the insects. After the cattle have been put out to pasture, the grubs leave the body through the breathing holes, fall to the ground and enter a short pupal, or resting stage. Following this, the flies appear, lay their eggs on the cattle and another generation begins. It is the holes caused by these grubs that decrease the value of a hide.

There are two methods by which the damage done by warble flies may be lessened. The first is to protect the cattle while in the field and the second is to destroy the grubs before they leave the animals in the spring. The first is a preventive measure which frequently gives good results, although it is one that is often neglected. Warble flies are sun-loving insects and seldom attack cattle that are in subdued light. This fact may be taken advantage of by providing darkened shelters into which cattle may retire at times during the season of fly activity. Such shelters need

not be elaborate structures, they may even be made of brush, but if they are located along woodsides or among clumps of trees, if such are available, cattle will make use of them and by so doing protect themselves from attack.

In the control of the grubs it is necessary to apply some material to the skin of the animals. Of the many substances tried, those containing derris have given the best results. Unfortunately, present conditions have restricted the use of derris and have made it difficult to obtain; it is to be hoped, however, that sufficient will be made available for use in the control of warble grubs. Those who, this year, use solutions containing derris should do so as economically as possible; in a year hence it may be still more difficult to obtain. The usual practice in applying the material has been to wash it over the entire back of an animal, which is a wasteful procedure. It is recommended that in order to conserve derris, cysts should be treated individually, thereby enabling one to use less. This method will take more time, but it should be adopted in view of existing circumstances. Proprietary washes containing derris have been available in the past, or the wash may be prepared at home. Details of the latter may be obtained from the Entomological Department at Macdonald College.

In the event of one being unable to obtain derris this year, benzol and carbontetrachloride are two other materials recommended. Both of these are applied to the individual cysts with the aid of an oil can and the results are said to be very satisfactory. Whether derris, or one of the other treatments is used, the first application should be made as soon as the lumps are perceptible on the backs of cattle, which is usually early in March. Do not wait until the grubs become "ripe". Following this, two or three further applications should be made at intervals of about ten days.

There is also the old method of extracting the grubs by hand which is quite satisfactory, although time-consuming where many animals are involved. If this procedure is employed, begin removing the grubs as soon as the lumps form, and if a grub should burst during the operation, wash the cavity thoroughly with a suitable disinfectant.

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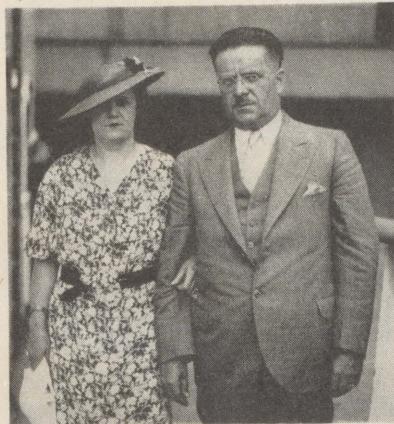
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See Page 21



A College Professor Makes a Good Farmer

by L. G. Heimpel



Prof. and Mrs. Fontaine.

"play" with a farm, to see what can be done with it. But Agriculture College Professors, as a rule, have not been numbered among the absentee owners of farms. Their salaries do not provide enough surplus cash for such large investments and most of them are so busy at their regular duties that a farm would be likely to suffer for lack of proper managerial attention.

An exception to this statement, however, is Professor C. A. Fontaine, in charge of the Soils Department of Oka Agricultural College, who owns a farm in the orchard district of Rougemont. When he bought this farm in 1918 he had only recently graduated from college, and to assume ownership of a farm meant going into debt for it. However, it was a case of this or of allowing the old home farm to go into the hands of a stranger.

The original Fontaine farm consisted of 350 arpents of tillable land, plus 30 arpents of sugar bush, and had been in the family since 1850. When Prof. Fontaine's father died the place was divided between two brothers, the professor assuming ownership of 124 arpents. Some of the land suitable for orcharding had been planted to apple trees, but the new owner immediately decided on additional plantings until today there are 40 arpents in orchard, 400 trees of which are now bearing. There are altogether between 1400 and 1500 apple trees. Last year a crop of about 375 barrels of apples was harvested.

A Believer in Underdrainage

As is the case with much of the land around such mountains as Rougemont, Mt. St. Hilaire and Abbotsford Mountain, where the flatter areas at the base of a hill receive much runoff from the hill, some of the land on the Fontaine farm required improvement in drainage. That which needed it most was drained some twelve years ago, about 5000 feet of tile being installed at that time. Last fall the writer had the privilege of surveying and planning underdrainage for an additional portion of the orchard which required improvement in the drainage. This will

In many sections of Eastern Canada it is becoming more and more common to find city men owning farms. In some cases the reason for the acquisition of farm property is a desire for security in case of business reverses or failure; in others it is a genuine interest in farming or

perhaps a desire to

require about 15,000 feet of tile and installation of this system is being planned for the near future.

Professor Fontaine is fully aware of the fact that to do well, apple trees must have a considerable depth of water-free soil into which the trees can send their roots. So he insists on improvement of this kind in his own orchard.

The farm is located on the west side of the mountain and is a beauty spot of which anyone might well be proud. The buildings are in first class condition, though so completely surrounded with trees, mostly fruit trees, that it is impossible to take photographs which do not show apple trees in the foreground.

While the farm shows everywhere the results of wise management of the owner, much of the credit of its pleasing condition must go to the farm operator, Mr. Armand Fontaine, a cousin of the owner's, and his wife, who for 22 years have been working the place. Armand treats the farm as he would his own, and as a result, both his family and the professor-owner are happy over the operating arrangement.

Other Farming Activities

While orcharding might be called the main specialty of the farm, there are also substantial dairying and livestock enterprises. There is a herd of 12 good quality Ayrshire cows producing milk for the Montreal market, milk having been shipped continuously to the dairy of J. J. Joubert for 21 years. Young cattle also are being raised so that there are usually from 25 to 30 herd of livestock on the place. The other livestock enterprise consists of the production of young pigs for sale. Six cows are kept for this purpose and the venture has proved a profitable sideline.

Not all of Prof. Fontaine's experience as a farm owner has been pleasant, however. In 1923 a tornado which wrecked 15 other barns in the community, also blew down his barns. He put up new ones, however, and a new silo; and though it meant a serious cash outlay at the time, the trim condition of the new buildings make the place one of excellent appearance, and provide very suitable quarters for the production of good livestock and its products.

Both Professor Fontaine and his farmer are believers in maximum efficiency of labour, therefore there has been a tractor — an I.H.C. 10-20 — on the farm for a number of years. It is used for practically all the plowing and other tillage work, as well as for threshing, silo-filling, and other belt work. Armand says he would not care to be without the tractor because it enables him to get rush jobs done promptly and because there is always plenty of power to do first class work even in hard ground.

Another very practical time saver on this farm is the water supply arrangement for spraying the orchard. This consists of a large steel tank mounted on a scaffold at the end of the implement shed. The tank is kept full of water by the windmill and is elevated sufficiently to permit filling of the spray tank by gravity through a large pipe in a few minutes. The outfit is not expensive but very efficient and a real time saver, which is always a necessity in the job of orchard spraying.

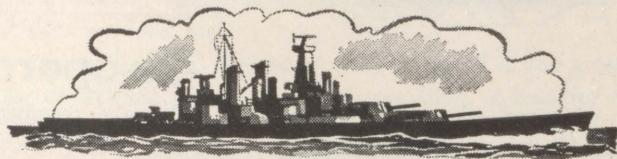
Being a keen soil improvement specialist, the owner of this farm has a good opportunity to practice what he "preaches" to his students. He believes strongly in the use of commercial fertilizer to supplement barnyard manure in the maintenance and improvement of the fertility of his land. There are, for instance, some 10 arpents of gravelly clay loam being used as a permanent pasture field. This area is being kept in top notch condition by the judicious use of commercial fertilizer. All told, from 4 to 5 tons of fertilizer are being used annually, about 1 ton being applied to the permanent pasture. Not only the fields but the animals also show the value of this treatment, doubtless due to the complete supply of minerals in their feed which, without fertilizer, is often lacking.

Professor Fontaine, as a teacher of students in agriculture, has made a valuable and permanent contribution to the farming industry of Quebec and Canada. However, the fact that as a young student, he gave way to the driving force of a sentimental attachment to his home farm to go into debt in order to keep the place in the family has provided the community with an example which will further increase his contribution to farming and farmers in general. No doubt his faith in farming as a means of making a living and his faith in himself also had something to do with his embarking on the venture. Whatever the complete circumstances may have been, we wish to compliment him on his courage and achievements.



All the buildings on Montrouge Farm are surrounded with apple trees.

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CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Co-operators Grow

A good educational programme will make members into loyal and efficient co-operators and the growth of the co-operative will depend on how fast and how well this is done. Experienced leaders in the co-operative movement believe that we should not organize co-operatives faster than we can create co-operators. In other words, a well informed membership which fully realizes all the difficulties as well as the possibilities of co-operation is the most valuable asset a co-operative can have.

Co-operative education is not content, however, to make people informed only about the details of co-operative business. The expansion of the movement depends on members who are, as producers, efficient in production, eager to take every opportunity to improve quality as well as volume of their product. It depends, also, on their

willingness to study market conditions and to meet them. As people get more and more experience and knowledge of co-operatives, this system of doing business for themselves will reach out into all phases of their lives. "Co-operation is the people meeting their own needs", says one co-operative leader. Those who begin as producers will extend to meet their consumer needs and vice versa. Co-operative Housing, Co-operative Hospitalization and Medical schemes and Co-operative Insurance are all carrying on successfully, although still on a small scale in Canada.

The aim of Co-operative Education, though primarily to produce efficient co-operators, is in the end to make wiser and more capable citizens.

MARKET COMMENT

The weekly ration of butter was reduced from one-half to one-third of a pound per person during the month. This allowance is expected to continue until March first. The trade reports some increase in supplies available.

Beef

Some increase in prices over the previous month was recorded in all beef prices with the exception of good steers. So few of these were marketed during the month that the decline in this item does not really mean much. Cattle marketings were few in number in the first three weeks of the year as compared with the similar period of the previous year. Bad weather and transportation conditions may have held back cattle during this time.

Hogs

The same explanation will scarcely hold for hogs as when they are ready they must be marketed promptly. The first three weeks of the year recorded almost as many carcasses graded as during the similar period of 1942. The price reached \$17.00 per hundredweight for B.1 dressed during the month.

Eggs

Increased volume of eggs coming forward was reflected during the month by lower prices as is usually the case during this season of the year.

Fruits and Vegetables

Firmness was apparent in prices of fruits and vegetables during the month. This is also a common seasonal influence.

Trend of Prices

	Jan. 1942	Dec. 1942	Jan. 1943
\$ \$ \$			
LIVE STOCK:			
Steers, good, per cwt.....	9.90	11.40	11.10
Cows, good, per cwt.....	7.31	8.70	9.17
Cows, common, per cwt.....	5.40	7.15	7.28
Canners and Cutters, per cwt.....	4.63	6.15	6.30
Veal, good and choice, per cwt.....	13.73	15.46	15.85
Veal, common, per cwt.....	12.25	14.03	14.15
Lambs, good, per cwt.....	10.62	13.45	13.50
Lambs, common, per cwt.....	10.25	11.45	11.80
Bacon Hogs, B.1, dressed, per cwt.....	15.60	16.68	17.00
ANIMAL PRODUCTS:			
Butter, per lb.....	0.34	0.35	0.35
Cheese, per lb.....	0.25	0.20	0.20
Eggs, Grade A, large per doz.....	0.34 $\frac{1}{2}$	0.47	0.35
Chickens, live, 5 lb. plus, per lb.....	0.22	0.23	0.29
Chickens, dressed, milk fed, A, per lb.....	0.27	0.31 $\frac{1}{4}$	0.34
FRUIT AND VEGETABLES:			
Apples, Quebec McIntosh, Extra fancy, per box (B.C.)	2.90-3.25	2.60-3.00	2.50-3.00
Potatoes, Quebec, No. 1, per 75 lb. bag.....	1.25-1.70	1.25-1.55	1.55-1.60
FEEDS:			
Bran, per ton.....	29.00	29.00	29.00

Want more eggs?
Use feeds containing
"VIDOVA"

See Page 21



Spuds and More Spuds

The lowly potato is coming into its own. In Great Britain it is on a preferred list not just because it is, as it has always been, a good staple article of food, but now because it is also a good source of Vitamin C. The Canadian Government is asking for an 11% increase in production in 1943 to meet the home needs and the export demand. At least three plants are now in operation in Canada dehydrating potatoes for export overseas, for ships stores where space is a problem, and for mines and contract jobs where facilities for keeping fresh vegetables from freezing are not available. Starch is being made from potatoes, too.

It is expected that growers in central Canada will face a strong demand this year for potatoes from the United States.

But with farm labour desperately scarce there is a question whether the higher production can be achieved. 11%



The needed increase in potatoes this year will come from places like those shown above. LEFT, is Odilon Lafreniere of Messines in the Gatineau, sitting on his potato digger, while his pickers work hard to keep up with him. Last year, he had a thousand bags of Green Mountain potatoes from this four acres. He markets them through the potato Co-op at Messines. They are sold to the lumber camps up the Gatineau and the Ottawa market.

may not seem so much compared to the increases being asked in some other farm products, but when it means 7 million bushels more potatoes, and when growing potatoes means back-breaking work, no matter how you take them, it does not look easy.

A good part of the answer may be found in the greater use of certified seed. Such seed is available, at least for the best potato-growing areas. In parts of Quebec the yield has been doubled when poor seed has been replaced by certified seed. An increase of 50% in yield may fairly be expected wherever seed has not been consistently treated for diseases. Here, then is one way to beat the labour shortage.

Another way to meet the demand will be for home gardens to be extended to include a larger potato patch. In towns and villages everywhere this year the vacant lots should be planted to potatoes. Few crops are easier to handle, or show more for the work than the humble spud.



RIGHT, is the root cellar and truck used by Omer Dionne of Cookshire, who grows potatoes on a large scale. In 1942 he had nearly 75 acres in potatoes—10 acres in certified seed. He uses a double-row planter the rows 38 inches apart, and cultivates with a tractor and a double hoe. He has a power digger and grader and employs 14 men in the harvest weeks. He feeds his small potatoes to his Hereford cattle, of which he has 70 head. The potato cellar has a capacity of 11,500 bushels.

Why Some Co-operatives Fail

Societies perish from dry rot, just from doing nothing that interests the members. Of all the ills that afflict co-operatives, the full membership meeting occupies a high place among the casualty causes.

Often a board resents the thwarting of their plans by the members. They do not want to be bothered by a members' meeting. I have had the president of a society tell me that members' meetings were a nuisance, and they wished they could get along without them. That may be good executive business but it is not good co-operation.

Concentrating too much authority in the hands of the manager has proved fatal to many societies. Beware of

the manager who is the whole show. Societies have failed because the manager was so important that he chose the directors and kept them in sufficient ignorance to make himself indispensable.

A most serious weakness of co-operation is the large proportion of societies depending for their success upon one individual — the manager. When he goes, the success goes with him. In the last analysis, success depends upon an intelligent, alert and loyal membership.

From Problems of Co-operation
by J. P. Warbasse

FARM LABOUR . . . (from page 5)

co-ordination of federal, provincial and local agencies most of the difficulties should be overcome. Such a classification could serve as a basis for the placement not only of those moved from other farms but also of those brought in from elsewhere.

Few persons are now available for employment in agriculture from outside sources except those who can help meet temporary peak labour requirements. These include high school students, under employed persons, townspeople who can spend their vacations or their spare time in the country, and men and women who might be granted short leaves from the services. This coming summer more persons in these categories will be needed. Plans are already being made in some provinces to meet the larger demand. Other outside sources which are being explored are prisoners of war, who are used extensively in England, conscientious objectors now in alternative service camps, persons discharged from the services and workers trained in agriculture who are let out of industrial operations that are being curtailed. In addition the possibility of increasing the skill of such workers through a few days special training in modern farm methods is being studied.

There has been much discussion by Farm Forum groups and other agricultural bodies of placing a ceiling on farm wages. Wages in other industries, it is argued, have a ceiling on them; why is there not one on those in agriculture? Farmers claim that they are caught between mounting costs of production and an inability to raise the prices of their products correspondingly. One means of checking the former would be a ceiling on wages. On the other side the position of hired farm workers must be considered. Their lot has never been an easy or attractive one. Their hours are long. Their work is hard and their pay has always been low. Wages have advanced considerably since the war began but they are still insufficient to keep workers on farms in many areas, let alone attract them from other industries. A simple solution to this problem is not likely to be found but the problem is nevertheless one that must be faced. It is probable that some help will be gained from examining the experience of other countries.

Finally it will be realized that no matter how fully broad plans to meet the farm labour problem are developed it is the farmers themselves who are largely responsible for their own work and that of their help. It is up to them to see that this labour is used effectively. They must understand that they will get the best results from their hired help by providing the best possible living and working conditions. They must also plan their operations carefully and they must cooperate fully with their neighbours. By so doing they can conserve labour and can use their resources to the maximum advantage. In the last analysis a solution of the farm labour problem depends upon cooperative action on the part of individual farmers, farm wage earners, local farm organizations and provincial and federal government agencies.

Fertilizer Interest Rate is Set

While fertilizer dealers may not *advertise* or *list* any fertilizer on any other terms than for cash payment, sight draft against a bill of lading, or for payment within 30 days from the date of invoice, yet they may allow credit to *approved customers* in which case they shall not demand nor receive any interest in excess of the rate of one-half of one per cent per month. This rate of interest, set forth in Wartime Prices and Trade Board Administrative Order No. A-326, is now in effect according to word received by the Nova Scotia Department of Agriculture from G. S. Peart, Fertilizers Administrator, Ottawa.

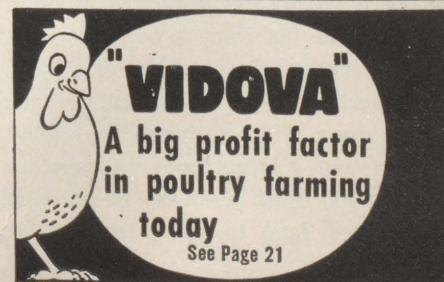
67,700 Feet Ditched in Nova Scotia

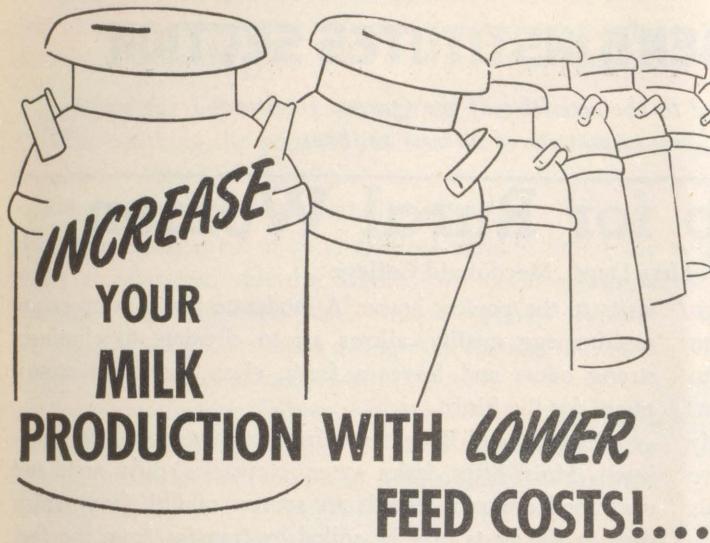
Farm ditching equipment used under the direction of Agricultural Engineer Banting is laid up for the winter. This equipment was in operation from April 28 to late November during which 67,700 feet was ditched, the work being done on 28 farms located in Colchester county and the western part of the province. The season's records show that the fastest work was done one day in May when 1055 feet was ditched in four hours, while the maximum for any one day was 1,800 feet.

Reports Very Few Reactors in Nova Scotia

The second general retest of cattle in Nova Scotia under the restricted area plan for the eradication of Bovine Tuberculosis is proceeding. The number of reactors, according to Dr. E. E. I. Hancock, Provincial Animal Pathologist, is very small. The distinction of having the lowest percentage of reactors goes to Yarmouth with .08 per cent or the rate of eight animals per ten thousand tested. Pictou is in second place with .2 per cent reacting. The test figures for the various counties since the start of the second test in 1940.

County	No. Head Tested	No. of Reactors	Per Cent
Yarmouth	9,785	8	.08
Cumberland	25,093	123	.5
Colchester	24,890	112	.405
Antigonish	13,297	28	.2
Pictou	21,092	33	.105
Hants	18,165	200	1.1
Kings	19,190	113	.589
Annapolis			
	(to Nov. 30/42)....	10,608	.29
Halifax			
	(to Nov. 30/42)....	606	.99





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42-44

THE OGILVIE FLOUR MILLS COMPANY LIMITED

The Farm Labour Problem

The Department of Agriculture is making up a list of young men and boys who may be available for farm work during the coming season. It asks that anyone needing hired help write at once to Mr. Alexandre Rioux, Agronomist, Department of Agriculture, Quebec, so that some idea can be had of how many men are going to be needed this year. It may not be possible to supply all the requirements from the men available but some measure of relief will doubtless be obtained.

The men who will be available for this work will be mainly those who are not eligible for military service, and schoolboys who have the strength and experience necessary. These will not all be the very best type of farm labour, but the situation is such that some help, even if not the best, is better than none at all. These boys will go out with the idea firmly fixed in their minds that they are doing an essential war work, and should make up in enthusiasm what they lack in experience. A little give and take on both sides will smooth the way.

"I wouldn't want to marry a widow and be a second-hand husband."

"Well, it's better than being her first husband."

Should Store Ample Ice

Dairymen of Nova Scotia have been advised to take advantage of the abundant 1943 ice crop by harvesting sufficient supplies to see them through the year. Thick and good quality ice is reported from most parts of the province. There was a thickness of 17 inches on the Dartmouth lakes on January 15, this being seven or eight inches more than at harvest time a year ago.

The storing of ice for farm use is comparatively simple and inexpensive. It can be stored in any old barn or shed and can be well preserved in sawdust, hay or straw. Sawdust provides the best insulation. Ice should take a very important place in dairy operation, when it is realized that every summer large quantities of milk are lost because of lack of cooling facilities. With the urgency this year for increased dairy production, coupled with an abundant crop of ice, there should be no loss due to lack of refrigeration.

Lone chick, taking a look around the electric incubator full of unhatched eggs: "Well, it looks like I'll be an only child. Mother's blown a fuse."

As the hen said — It takes grit to do my job.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Another War Job for Rural Women

by N. Nikolaiczuk, Poultry Dept., Macdonald College

There has been a long standing association between farm women and the family flock. Now comes an even greater opportunity for women to make a contribution to the war effort on the poultry and egg production front.

The Canadian Federation of Agriculture has recently announced that the farm labour shortage will likely prove to be the main obstacle to the attainment of the 1943 goals in agricultural production. In this proposed program the objective for Quebec is to increase hog production by 25%, butter output by 10%, egg volume by 15% and poultry meat by 14%. This is in addition to increases in field crops. With dwindling reserves of farm help to meet this unprecedented demand, farmers will be unable to do more than attend to the more arduous work. Undoubtedly they must devote some of their precious time to the heavier tasks of poultry management, such as cleaning houses, changing litter, carrying bagged feed and watering. But at present, and even more so when spring work becomes the foremost preoccupation, women can assist greatly in the poultry war effort by improving the quality of the eggs, by increasing the saleable volume and by careful attention to maintenance of flock health and productivity. These constitute the finer and more painstaking details of good flock management and the realization of maximum returns for the additional effort.

How to Maintain Quality

Quality, by our present standards, includes freshness of egg contents and both cleanliness and soundness of shell. A newly-laid egg usually possesses these characteristics. Fertile eggs deteriorate more rapidly. Market eggs should therefore be sterile. Germ development begins at 69° Fahrenheit and all temperatures below this and in keeping with bird comfort are preferable. A laying house temperature of 50-55° F. with reasonable uniformity meets all needs. Ventilation is an important factor. Mid-day temperatures and wind direction call for adjustments in the ventilation system. These can only be made by periodic

visits to the poultry house. A moderate house temperature sustains egg quality, allows air to circulate to eliminate strong odors and leaves a fresh, clean, healthful atmosphere for the birds.

Grade A and B eggs require a high standard of cleanliness. Moist litter, leaky water receptacles, dirty nests and uncleaned dropping boards are sources of filth from which eggs in the nests may be soiled by transfer from the feet of birds. More frequent gathering of eggs is highly recommended to ensure cleanliness, prevent absorption of odors by the eggs and to lessen the possibility of breakage.

An irksome task, but one which will reduce loss in grade for reasons of uncleanliness, is the individual removal of soiled areas from the shell. A moist rag may be used but this usually results in the necessity of washing the entire egg, which in turn impairs the storage quality. Sandpaper, emery cloth or steel wool do a more satisfactory job.

Egg breakage constitutes a substantial loss to the egg producer. Insufficient nesting material — such as straw or shavings, crowding in the nests, and placement of nests at such a height or in such a manner as to prevent easy access to the birds, are contributing causes. Much can be done, however, by the simple expedient of more frequent gathering. Eggs with unsound shells can only be classified as such on the market and thereby command a much lower price. While it is preferable that all eggs be candled at home to remove blood spots and meat spots, they should at least be tested for soundness of shell by belling — a process of tapping them together gently. Eggs sound in shell will click when belled, whereas cracks will be detected by a hollow thud. Those found to be cracked might be better used on the farm.

Eggs should be marketed as often as possible and at least within a week to ten days. In the meantime the holding environment should be kept at a temperature of 45-50° F., as moist as possible, and free from foreign strong odors.

Message from the F.W.I.C. President

The following message from Mrs. Harvey Dunham, President of the Federated Women's Institutes of Canada, to all its members, contains good advice for the times:

"Nutrition holds, with war work, the centre of the stage in our programs, yet let us be ever conscious of the fact that our future citizen has a mental and moral side to his nature as well as a physical, and all are equally important. This then is my 1943 message — Look well to the work that lies nearest, recognize and accept its basic importance — the developing of our future citizens, the creating and maintaining of the highest form of morale, and after this 'Whatsoever thy hand findeth to do, do it with all thy might'. Thus will 1943 prove a happy year and bring that best of all gifts, the consciousness of work well done."

These simple requirements are essential to the preservation of egg quality — not strenuous in the physical sense but having a definite place in the egg production program.

Hints for better Management of the Layers

While making the periodic visits to the poultry house, attention to certain seemingly unimportant practices serves to stimulate the birds to perform their best.

While laying mash of good quality should be before the layers at all times, mid-day feeding of moistened mash sharpens their appetites and induces greater feeding activity. Even such a simple measure as stirring the mash frequently produces similar results.

Some poultrymen follow the practice of scattering a handful of scratch grain upon the litter to sustain activity among the birds and minimize the tendency to daytime roosting.

A daily allowance of green feed or some succulent such as cabbage, carrots, mangels is a wonderful change from dry feed and the birds will relish this addition to their diet.

Grit and shell in open hoppers should not be forgotten. True, some calcium is obtained from the other feeds but not in sufficient quantity to meet the needs of heavy egg production. Without calcium, soft or thin shelled eggs will be laid and if the deficiency is acute the number of eggs will be reduced.

Artificial light in the poultry house brightens the interior, induces greater activity, and thereby stimulates higher egg production. Electric light or a coal oil lantern are suitable to extend the length of the working day. This practice has limits and birds should be exposed to lights for no more than 13 hours daily. One to two hours of light in the morning and the evening will force the layers sufficiently.

Production and Health

Ill health and non-productivity are often caused by lack of attention. Close and frequent observation averts some winter pauses, neck molts and flock vices. Loss of body weight as the result of heavy production is not uncommon. Periodic handling to note the state of fleshing will serve as a guide and if birds are going "light", more scratch grain will remedy the condition. Isolation of sick individuals for examination and recovery is highly recommended.

Regularity of feeding management, close observation and individual attention are difficult practices to follow where limited time is available, but these same practices are worthwhile in the furtherance of health and egg production.

In the past, women have successfully carried on the lighter duties of poultry flock management. Their particular aptitude for matters of cleanliness, detail, close observation and regularity are definite attributes and they can lend a great deal of assistance in the attainment of the poultry produce objective for 1943.

LOOKING FORWARD

by M. Elizabeth McCurdy

Claiming the attention of a great part of the social and political life in Great Britain, and with interested on-lookers all over the world, the momentous document known as the Beveridge report, considered so vitally important to the future of Britain that Parliament postponed debate on it until after the New Year, may well take its place beside all the great Reform Laws and other important legislation of the past century.

The report of Sir William Beveridge, Chairman of the Royal Commission on Social Security after the war, has a scope so wide that it covers the life of the human being from birth to death, so providing that at no time from the beginning to the end of life, will the human being be penniless, or down and out. The object of the Commission is to abolish actual want for every citizen of the United Kingdom.

Strange to say, the findings of the Commission are not meeting with the opposition feared. Very little political opposition is offered so far, because it is seen that the Beveridge report is too important to be lightly pushed aside; and there is a prevailing opinion that any government which fails to adopt its essentials will be likely to go down to defeat. It is considered possible that the Report may be a vital issue at the next election.

The British public generally seems to have a friendly attitude towards the Report. Labour is largely in favour of its findings. Those who oppose it on the grounds that it will destroy the initiative of the individual have already been answered by the Archbishop of Canterbury, who declares that the effect will be the exact opposite. The citizen, he maintains, whose whole time is taken up with scraping together a living for himself and family, whose whole waking hours are spent in wearying toil, without opportunity for reading, rest or cultural occupations, will have time and opportunity to better himself in higher standards of living and a general improvement in his lot in life.

Just how all these plans are to be worked out does not yet appear, but certain it is that the Beveridge Report has unveiled a great vista of future well-being, in sharp contrast both in appearance and motive to that which is presented by the overwhelming greed and selfishness which are struggling to claim possession of the whole world today.

"Where there is no vision the people perish." Where there are no dreams there is no hope to be fulfilled by the worker. The dreams of Sir William Beveridge and his Commission may appear far-fetched and Utopian, but at least they point to hope for the living and to a purpose accomplished by those who have died.

RED CROSS AND WAR WORK

Following is a summary of Red Cross and War Work as received by Miss Lucy Daly, Provincial Director of this department, in December, 1942.

Quebec County

Self-denial fund, \$20.00. Sugar sent to Magdalen Islands for jam, \$15.00. War Savings Stamps, \$8.00. British War Service for Children, \$6.00.

Richmond County

Bundles for Britain, 43 articles. Sewn articles, 419; knitted, 96. Quilts and afghans, 21. Honey, 228 lbs. Jam, 10 tins.

Compton County

Money and blankets to Russian fund. Sewn articles to Red Cross — 17 quilts. Dried fruits, clothing and blankets sent to England.

Gaspé County

Sewn articles, 53; knitted, 124.

Shefford County

Sewn articles, 109; knitted, 220. Ten utility bags, one layette, afghans, quilts, 5; Comfort bags and Bundles for Britain; 16 soldiers' boxes sent overseas, \$9.00 in cash.

Bonaventure County

Jam project, \$100.00.

Pontiac County

All branches working for the Red Cross.

Rouville County

Fifty cans of jelly sent to Red Cross.

Missisquoi County

Knitted articles, 100 outfits; hospital supplies; 10 utility bags made. Six quilts for Red Cross, and 7 Norwegian leather vests made.

Montcalm County

Fifty lbs. strawberry jam and 100 lbs. of tomatoes were sent to the Red Cross, 20 lbs. maple sugar to the Navy League, 10 lbs. chocolate to R.A.F., \$30.00 given to the Red Cross; 20 Xmas boxes to men overseas; 45 boxes to local men in the Services; 65 books sent to a prisoner of war, 55 books to Services, War Bonds bought, \$50.00.

Gatineau County

Victory Bonds and stamps bought, \$104.00; collected by Red Cross, \$95.00; donations, \$85.00; blanket fund, \$21.00; poppies, \$2.00; Allied Post, \$3.00; Red Cross, \$25.00. Articles knitted, 76; articles sewn, 119; clothing, quilts and ditty bags sent to Red Cross.

Well-deserved Assistance

A well-earned tribute from the whole of Canada is the organization in various centres of population of Aid-for-Russia Committees. This movement has taken place following the expression of opinion by the Department of National War Services that such action would be desirable. In view of Russia's heroic resistance the rest of the world is under an obligation to assist Russia by sending not only

war weapons and agricultural tools but the very necessities of life, of which she stands in direst need.

Goods are to be assembled on both Atlantic and Pacific coasts, from which ships sail for Russia, and all available space will be filled with supplies needed there. Appeals for medical and hospital supplies of all kinds are being made, the financial objects for this purpose being one million dollars.

Amateurs at the Reins

It is an odd thing to a generation which knew another day when motor cars on country roads were a rarity, that another generation has grown up which knows as little about driving a horse as about taming an elephant. But such is the case, and some of the newspapers have been printing elementary information such as this:

"To make a horse turn to the right shout 'Gee' at it in a good loud voice; this appears to be horse language for 'right'. 'Haw', on the contrary, means 'left' and should be shouted loud enough for the horse to hear you the first time. From where you sit, the left hand horse is the 'nigh' horse and right hand horse is the 'off' horse. If you want the horses to stop, shout 'Whoa' at them and if they feel like it they will stop; to make them go into reverse, you shout, curiously enough, 'Back'. If you wish to pose as a classy and nonchalant fellow, hang one foot over the side of the buggy and never use the step in dismounting."

Back in those times when the horseless-carriage was a curiosity and the rubber-tired buggy the very latest in luxurious transport, every young man on the farm had his own outfit, and once or twice a week when the chores were done he would hitch his well-groomed steed to his shining buggy and go calling on his best girl. If they went driving together it was common experience that one-armed driving had no perils, and the horse always knew the way home.

The city youth had at his service livery stables almost as numerous as gasoline stations today, where he could rent a snappy outfit for a dollar or two, and at least he knew what Gee and Haw meant. An evening or Sunday drive out into the country was well within his skill. Often the finer points of horsemanship were beyond him, but livery horses were wise old birds and they, too, knew the way home.

And now the sons of these youngsters, living when airplanes travel at 400 miles per hour and a man can have breakfast in London and dinner in Montreal, are turning back to the horse—but they have to be told that Whoa means stop. It is a curious sidelight on the times.

—Ottawa Farm Journal

It is a different proposition if the State spends money to inspire and to teach people to look after themselves.

Q.W.I. NOTES

Gatineau County

Aylmer East Branch had a most interesting meeting which was addressed by two guest speakers. Miss Gladys Arnold, who left France shortly before the German occupation, and Miss Alice Chalefour, who left Indo-China before the arrival of the Japanese, told of their experiences and of the work being done to aid the Free French. Another highlight of the meeting was the announcement that a bundle of pillow-cases and refugee clothing sent to England by this Branch some time ago had been salvaged from a wrecked vessel by a woman living on the coast of Scotland and used for ship-wrecked victims. Eardley Branch raised nearly \$50.00 at a community supper, sent 19 boxes to overseas boys in the service, and packed 24 boxes for boys serving in Canada. Three dollars were sent to the Allied Post, and a quilt to the Red Cross. Rupert Branch planned to send boxes to the boys and girls from the community who are serving in the Army. Wakefield sent comforts to boys overseas and received letters of thanks from the Matron of St. Agatha's Home, England and from an Institute Branch for clothing and quilt sent recently. Wakefield arranged to have clothing made for air-raid victims from goods received from Toronto firms. The speaker of the afternoon was Mrs. F. Maxwell, who reviewed outstanding events of 1942. Wright Branch filled dime-cards and these were sent to the Allied Post. A four-dollar War-Saving Certificate was bought. Boxes were sent to boys serving overseas and in Canada. A Xmas cake was sent to a sister Institute in Scotland. Miss Vallaincourt of the Gatineau Health Unit gave an address on the prevention of contagious diseases. A bread-making contest was won by Misses Inez Derby and Lorna Brown. Community singing, led by Mr. Petit, local Agronomist, was a feature of the meeting.

Huntingdon County

Huntingdon Branch finished six seaman's vests and exhibited them at the meeting. Gifts for the Navy were brought in to this meeting, and plans made to fill a number of ditty bags. A personal letter was read from a sailor who had lost his home and family in the destruction of Coventry, expressing his appreciation of a ditty bag received from the Branch. Six boxes were sent to boys overseas. Price Ceiling was studied and literature distributed. The guest speaker of the meeting was Rev. Mr. Woodside, whose subject was "Ordinary People."

Pontiac County

Shawville Branch arranged to secure a McGill Traveling Library for use of the members. A gift was presented to a member on the occasion of the twenty-fifth anniversary of her wedding. Beech Grove had an address on the Benefits of Democracy, and Bristol Busy Bees heard a paper on Our Heritage of Freedom. A discussion on Red Cross work took place, and work supplies were given out.

Elmside Branch had an article on the Alaskan Highway, and an address on the prevention of contagious diseases by Dr. Quyon. Quilt blocks were brought in to the meeting.

Wyman Branch had an interesting description of the Book of Remembrance recently completed. A special offering was taken to assist a needy family, and a Xmas programme carried out.

All Branches sent many boxes overseas.

Sherbrooke County

Brompton Road raised a special fund to send boxes overseas. The Branch catered for a supper for the Rotary Club of Sherbrooke, sent jam and jelly to the Wakes Home, and baskets of vegetables to the Red Cross also sent ten boxes overseas and packed four for local boys in the Army. Local schools were remembered at Xmas time. Lennoxville Branch reported a total of 334 sewed articles and 98 knitted for the last three months of 1942. Members contributed cash for seeds for Britain and heard as programme a book review by Miss Moorhead of the High School staff. This Branch sponsors a "Bundles for Britain" with eight members, all of whom are members of the Institute. A total of one thousand new, renovated and cleaned articles sent to Britain stands to the credit of the society since its organization about nine months ago. Cherry River Branch accented school work, supplying treats for the children.

Rouville County

Abbotsford collected a large supply of garden seeds for Britain and sent books to prisoners of war in Germany. A school treat was arranged at Xmas time.

Extra Sugar for Canning

No extra supplies of fruit are going to be allowed to go to waste this coming summer and fall, if it is at all possible to provide the extra sugar needed for their canning.

The ration administration of the Wartime Prices and Trade Board is taking early steps to find out just what the sugar situation is likely to be, how much will be needed for the canning season, and how soon they can tell the public just what will be allowed.

The canning season officially opens on June first, and the ration administration is commencing a survey at once to get some idea of just what extra sugar is likely to be needed and how much will be available for canning. The sugar council met on January 28, and at that time plans were discussed for getting proper distribution of the extra sugar for canning.

Housewives are being told in the meantime to save every type of glass jar and container that might be useful in the canning season. When the canning season arrives there may be a shortage of containers, both tin and glass, so steps should be taken now to clean and store away all possible containers. Rubber sealers should also be saved, and supplies of wax conserved.

Battery-Run Radios Should be Assured Longest Possible Life

Battery-run radios, which are found on many farms, and in many towns and villages across Canada, should be operated with care, and given all the attention possible, so that replacements will not become necessary.

Simple conservation rules, which are easy to follow, are given by Consumer Information Service and will assure the longest possible life. It would be a pity if some of Canada's favorite programs were "blacked-out" for individual families by carelessness and inattention to radio sets.

Batteries should not be wasted. By this is meant that the radio should be operated only when there are programs on the air which are being listened to by the family.

Long, continuous radio operation should be avoided. Instead, reception can be broken up into a number of shorter periods.

Batteries should be kept strictly away from heat.

As insurance against battery wastage, the radio should be checked regularly for weak and faulty tubes.

When not in operation it is a good idea to have the batteries disconnected. This is an extra check against the radio being left on accidentally and where there are youngsters it is also a guard against the unnecessary operation of the radio.

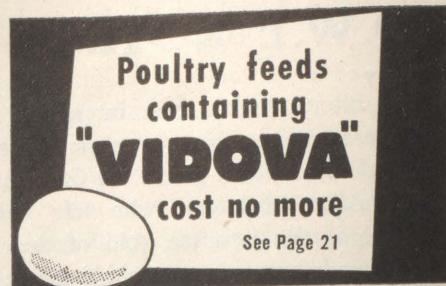
Centralized or Individual Marketing Subject of N.S.F.G.A. Discussion

Centralized or individual marketing was the theme of a special meeting of fruit growers called by the executive and educational committee of the Nova Scotia Fruit Growers' Association at the Cornwallis Inn, Kentville, Thursday, January 28. The special speakers were Arthur K. Lloyd, President of the British Columbia Tree Fruits Board Limited and Dr. J. E. Lattimer, Economist of Macdonald College. The former spoke on the History of Centralized Marketing in British Columbia, while the latter discussed the Benefits of De-centralization or Individual Marketing.

No More Molasses

There is no more molasses for livestock feeding: all stocks of molasses have been taken over by the Sugar Controller. All molasses produced during the manufacture of beet sugar is going to war industries, and there is not enough of the other to permit any of it to be used to feed animals. When molasses is prescribed by a veterinary as a medicine, a certain amount is still available, but there will be none for any other purpose except for human consumption.

The need for scrap metal for use in our steel mills is a continuing need. Many co-ops have helped to collect it from their members' farms; have contributed worn out and obsolete parts from their own plants. The need still exists. It is something co-ops can do.



FERTILIZERS . . . (from page 2)

five eastern provinces to advise on the very best use of the available stocks. After consultation with this committee and other interested bodies, the Administration has taken definite action. The more important steps are discussed separately below:—

1. Reduction in Number of Mixtures Sold

As with the mixed goods trade in other commodities, notably foods, peacetime conditions had resulted in a large number of formulae which differed very slightly from one another, many of which were not by any means absolutely necessary. For very obvious reasons these have been cut to the bone. In eastern Canada five standard so-called "war economy brands" are now available as follows: 0-14-7 (replacing 0-16-6); 2-12-6; 4-12-6; 0-12-10 and 2-12-10. These are designed for general cropping and are thought to provide sufficient range in formulae to meet all requirements. A limited production of special brands is provided for such special crops as tobacco, apples and the like.

2. Standardization and Concentration of Formula

Mainly as a measure of efficiency in manufacture, every attempt is being made to standardize fertilizer formulae. If, for example, the mineral elements (phosphorous and potash) are in a definite ratio, e.g. 2:1, nitrogen in varying amounts can be added to this common base to provide three or more brands, e.g., 2-12-6 and 4-12-6, with considerable economy in preparation. For obvious reasons a great saving in transportation would result from the use of more concentrated formulae—e.g. 2-12-6 vs. 4-24-12—which would provide the same result with a much smaller application. This thought is very much in the minds of those in charge, but is impossible at present, since use must be made of some low grade basic material—particularly with potash—which, while quite satisfactory, precludes the possibility of mixing concentrated formulae.

3. Fertilizer Subsidies

In normal times such bulky material as the raw product for fertilizers is shipped as much as possible by water transportation. Since this is now largely impossible, the cost to the manufacturer has gone up considerably. In view of this situation, and quite rightly, the administration felt that they were fully justified in subsidizing the trade so that the otherwise inevitable increase in price would not

(Concluded on page 31)

Tie Those Calves

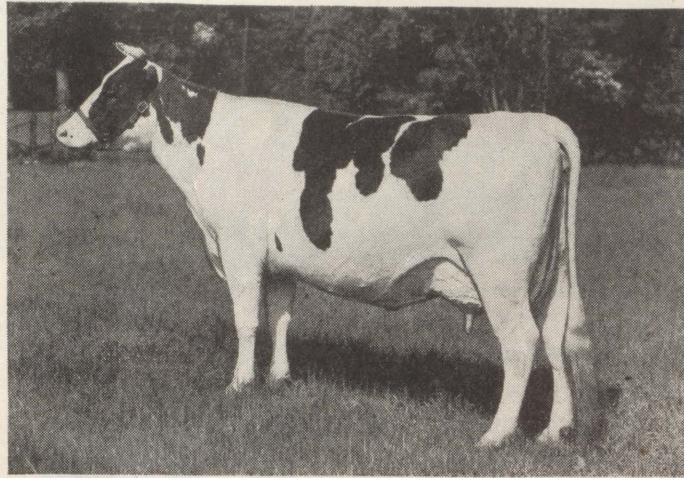
by Gordon W. Geddes



It's a good idea to let the calves out on pasture to get the grass vitamins and protein and the sunshine vitamin. It's also a good idea to give them skimmilk just the same. But it's not a good idea to have them standing sucking each other after they finish the milk. It may mean some dry quarters when they freshen. What's the answer? Stanchions in the pasture fence to tie them for feeding. It won't take much time or essential material to make them either.

Fence posts will make the main support with three or four stanchions between each pair of posts. Nail a pair of boards on top of each other between these posts at top and bottom. Put a block of board between them to leave a slot between. For each stanchion desired cut a block the proper length to fit between the stanchion uprights. Nail one in the top and bottom slots for each stanchion. For the uprights saw two boards the proper height. The fixed one is nailed in the slot next the blocks. The moveable one is held in place on the opposite side of the blocks and a $\frac{1}{2}$ in. hole bored through it and the supporting boards at each end. A wooden pin in the bottom hole forms a pivot for the upright. The pin may be held in place by driving a shingle nail through each end. A loose pin may be stuck in the top hole to hold it shut.

WHY CHOOSE HOLSTEINS?



Because:—

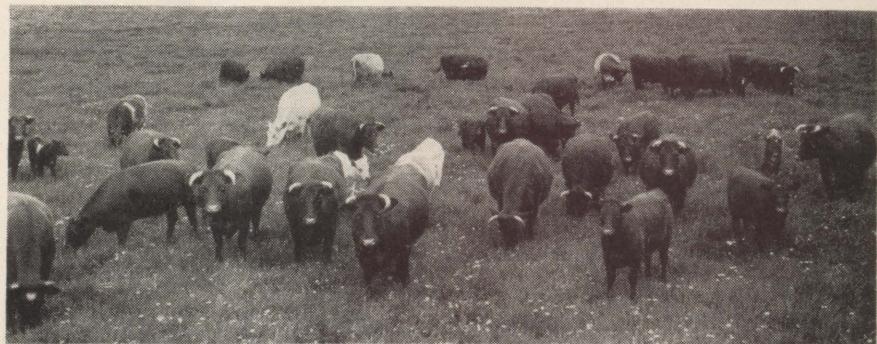
1. Holsteins are the world's heaviest milk producers.
2. Holstein milk is the most easily digested.
3. Holsteins find a ready market.
4. Holstein calves sell for more.
5. Holsteins are the cattle of the future.

WRITE FOR LITERATURE

THE HOLSTEIN-FRIESIAN ASSOCIATION OF CANADA

Room 25 — 152 Notre Dame St. East,
Montreal, Que.

HERMAS LAJOIE,
Secretary-Treasurer



SHORTHORNS--The Farmer's Breed

No breed can offer the farmer so much as Shorthorns.

THINK of those market topping steers, of the extra dollars obtained through greater weight for age, of the easy feeding qualities, of those wonderful milk cows.

UNDER PRESENT CONDITIONS—you cannot afford to overlook the merits of the Shorthorn; if faced with a labour shortage why not avoid milking cows; turn to SHORTHORNS and raise profitable steers; when conditions are normal Shorthorns can be milked profitably, and you can sell market topping steers as well. **No other breed offers such possibilities.**

BUY A SHORTHORN BULL—no bull can more profitably head your herd than a Shorthorn, his progeny will be good, even though from common dairy type or range cows, and such progeny is in keen demand everywhere.

For free literature or help in securing foundation stock, write

CANADIAN SHORTHORN ASSOCIATION—Gummer Bldg.—GUELPH, ONT.

STRIPPINGS

Eddie Charland, who helped us last summer, still does so on Saturdays. The other day we were working in the woods and he was pulling some limbs up out of a ravine. I guess he thought it rather heavy work for he suddenly straightened up and said, 'By gosh! I'll have to look out or you'll be feeding me hay.' They used to tell of another fellow who said that doing such jobs made him feel as if he was cheating a horse out of a job. At that Eddie may be eating hay or dried grass some day, not because he is working like a horse but because it is good for him. We have heard of people mixing powdered grass with fruit juice or milk for a vitamin drink. The latest idea was to put it in the bread and have a green loaf. So if someone hands you a green slice don't decide it is flavoured with Paris green until you have investigated.

I never thought I was superstitious but I sure did have a time when I went after the thirteenth load of wood on the thirteenth day of the month. I still think, though, that if I had drawn a different load first, my trouble would have come on the fourteenth one just the same. It was due to slippery beech logs that were too heavy for one man anyway. Beech is slippery enough always but these had a nice coat of ice all over them besides. However by the use of various hitches with chains and canthooks I finally got a load with no more serious injury than a rainbow-hued lump on one knee. If one must handle logs alone it is certainly a help to know the various ways of securing leverage with chains. A second canthook to get a fresh grip is also useful, especially if you happen to be working near the road and a neighbour comes along at a critical moment!

Butter rationing may mean a critical moment for the dairy farmer. It is starting a shout for the entry of margarine into Canada. Somehow we can't quite understand where the oils to make margarine would come from since there is such a shortage of them even for shortening and essential war purposes. Any way somehow we should try to increase



1 You can take your fat drippings, scrap fat and bones to your meat dealer. He will pay you the established price for the dripping and the scrap fat. If you wish, you can turn this money over to your local Voluntary Salvage Committee or Registered Local War Charity, or—

2 You can donate your fat dripping, scrap fat and bones to your local Voluntary Salvage Committee if they collect them in your community, or—

3 You can continue to place out your Fats and Bones for collection by your Street Cleaning Department where such a system is in effect.

SF 434

DEPARTMENT OF NATIONAL WAR SERVICES
NATIONAL SALVAGE DIVISION

**THEY ARE URGENTLY
NEEDED FOR EXPLOSIVES**

**Keep on Buying
WAR SAVINGS
STAMPS**



Canada West Indies Molasses Co. Ltd.
MONTREAL

production of butter or get it spread thinner for once margarine got in it might be hard to get out again. We have found the ration sufficient but it is hard on those who can't get the ration allowance because it isn't available. Some people here have spread it thin enough so part of their coupons expired before they were due. In another case a family said they had lost eight pounds of butter by coupons expiring while they made butter at home. This is a misunderstanding for home butter is supposed to be compensated for with coupons just the same.

Due to the kindness of a projectionist home on vacation, we got a chance to see some of the Canadian Film Board pictures. It was certainly a good show and made us wish we could be on one of the regular routes. Circumstances went against us this year but there's another year coming—we hope. If there isn't it won't matter either way.

It was predicted that the fertilizer situation would be pretty tight next spring. Now the fire at Canada Packers will make it so much tighter. It is also upsetting to the zoning idea for the prevention of waste in haulage for the zones will have to be re-arranged. That seems like another wartime economy that could well be extended to peacetime. It may not sound like it but it is also an economy to pay the \$2 per ton extra for fertilizer containing borax to use on the turnip field. It's a pretty sure prevention for brownheart which not only spoils the turnips for table use but also reduces the quality and the yield for feeding purposes. We have added borax to a small quantity of fertilizer for garden turnips and it certainly made a big difference. We have intended to try a little of it on a patch of alfalfa after seeing pictures of what happened to some plants that got a little. We haven't done it yet but it seems reasonable that if boron is good for alfalfa and is deficient enough to cause brownheart, it ought to help the alfalfa. In case you didn't know it, you're not supposed to use fertilizer on your lawn or your private golfcourse, unless you let the stock pasture it off. Either way it will mean less mowing.

Care of Breeding Ewes

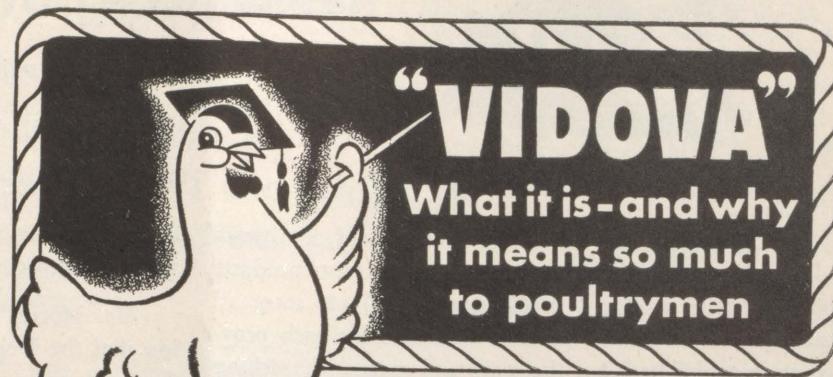
Ewes that have been "flushed" during the breeding season, and are in good flesh, may be carried on hay and turnips or silage until a month or so before lambing, providing the hay is early-cut clover or alfalfa and of good quality. If grass hay or late-cut hay is fed, a light grain ration is necessary to ensure the ewes being in good condition at lambing. Like the dairy cow, the condition at freshening governs, to a great extent, the succeeding milk flow. Regardless of the other feeds available, a mineral mixture should be kept before the flock at all times.

Turnips should always be clean and free from decay. Frozen turnips or silage should never be fed. For pregnant ewes, not more than 4 pounds daily per ewe should be given to large ewes or 3 pounds to those of the smaller breeds. During the last month of pregnancy, reduce the succulent feed to 1½ to 2 pounds daily and start feeding a light grain mixture, (¼ pound daily, or more if the ewes are thin). After lambing, gradually increase the roots to 5 pounds or more daily, and the grain to 1½ to 2 pounds, depending upon the percentage of twin lambs born.

Fresh, clean water should be available to the flock. Do not depend on snow as a water supply. If the lamb crop is not arriving until late March or April, treat the flock with phenothiazine tablets two weeks or so previous to the first date of lambing. If winter lambs are expected, postpone the treatment until the lambs are a week or more old, but treat before the heavy freezing weather is over.

Buildings for sheep should be well ventilated and free from draughts. For winter or early spring lambs, provide one or more warm lambing pens. Arrange for the flock to have regular exercise. This may be done by feeding the hay at a distance from the barn.

Buy Some
War Savings
Stamps



"VIDOVA" What it is - and why it means so much to poultrymen

"Vidova" is a concentrate of Vitamin D containing 1,000 million A.O.A.C. units per imperial gallon.

Every poultryman knows that Vitamin D—the sunshine vitamin—is an essential factor in higher egg production, greater hatchability, and faster growth. However, under today's intensive methods, poultry are not exposed to enough direct sunlight, and natural fish oils, although a source of Vitamin D, are expensive, bulky and lack stability and uniformity of potency.

'VIDOVA' DEVELOPED AFTER YEARS OF RESEARCH

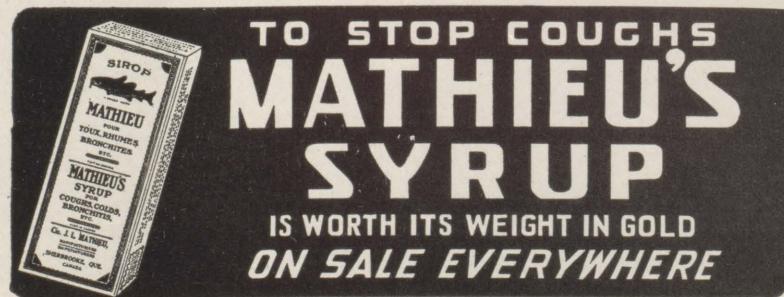
To meet the need of a stable, uniform and inexpensive source of Vitamin D, Vidova was developed after years of research by Charles E. Frosst & Co. It contains 240,000 A.O.A.C. units per gram, and, being made in Canada under laboratory control, it is of uniform potency and always available.

USED BY LEADING FEED MANUFACTURERS

Leading feed manufacturers were quick to see the importance of "Vidova" as a reliable source of Vitamin D, and now many poultry feeds are being fortified with this important food supplement. Because proper feeding means healthier birds and more profit for the rancher, it pays to buy these feeds always.

Feeds Fortified with Vidova Cost No More!

Charles E. Frosst & Co.
MONTREAL CANADA





DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Reaching our 1943 Objectives

The Dominion-Provincial Conference held at Ottawa in December set up minimum quantities of farm products which must be produced in Canada in 1943 to meet all requirements. At this conference objectives for each province were established, but the ways and means of reaching these objectives were left to the discretion of the individual provinces and their Departments of Agriculture.

The table accompanying this article shows at a glance the objectives for Quebec: the amounts of each crop shown therein represent the minimum that must be grown this year. In nearly every case the amount asked for 1943 is larger than was produced in 1942 under excellent growing conditions. It is fully realized that 1943 may be much less favourable than 1942 as far as weather is concerned; the question of labour is a most serious one, as is the present shortage of feed. These obstacles are very real ones and the argument is heard constantly that under present condition the desired quantities may be impossible to get. Nevertheless, it cannot be too strongly emphasized that these figures represent the absolute minimum, and that, by some means or other, they *must* be obtained.

Provincial Committee

To plan ways and means of obtaining this increase in production in 1943, the Provincial Department of Agriculture called a meeting in Quebec on January 26 and 27 to which were invited leaders in agriculture in this province. Divided into sub-committees, one for each of the chief products — livestock, dairy products, hay and pasture crops, sheep and hogs, grain, poultry and vegetable crops,

these men worked out an outline of the programme which will be followed during the coming months.

Mr. Morin, Associate Deputy Minister, told the meeting that the Department realized that the task of planning the production campaign was too big to be handled by the Department alone, hence the help of everyone who could assist was being asked for. Committees will be set up in every community (organization of these may be well under way before this issue gets into print) which will include representatives of every organization in the community. The first task of these local committees will be to convince the residents of their districts of the absolute necessity for everyone to go "all-out" next summer; their second duty will be to help put into practice the plans for production which will be published as soon as possible.

At the first meeting of the provincial committee Premier Godbout admitted that the labour situation was serious. He was convinced that it is absolutely necessary that our farm population be maintained and that something must be done to keep our young farmers fighting on the home front, on the farm, in sufficient numbers to meet the ever-increasing demands for food. He also pointed out that part of the reason for these large increases is due to the fact that not all the food that is shipped overseas arrives safely at its destination.

Detailed Plans Made

Each sub-committee discussed the problems of increasing production of the crop with which it was concerned,



Members of the Provincial Committee for Intensive Production

Province of Quebec, Production Goals for 1943

Production 1941	Production 1942 (*)	INCREASE OR DECREASE IN 1942 COMPARED WITH 1941		Minimum Objectives for 1943	INCREASE OR DECREASE IN 1943 COMPARED WITH 1942	
		Quantity	%		Quantity	%
Market hogs	450,843	350,000	— 100,843 —22	437,500	— 87,500 +25	
Butter (pounds) ..	76,461,000	71,000,000	— 5,461,000 — 7	78,100,000	+ 7,100,000 +10	
Cheese (pounds) ..	36,769,000	65,130,000	+ 28,361,000 +77	58,617,000	— 6,513,000 —10	
Eggs (dozens) ..	35,921,000	38,110,000	+ 2,189,000 + 6	43,826,000	+ 5,716,000 +15	
Poultry meat (pounds)	24,172,000	27,348,000	+ 3,176,000 +13	31,177,500	+ 3,829,000 +14	
Oats (acres)	1,695,000	1,686,000	— 9,000 — 0.5	1,700,000	+ 14,000 + 1	
Barley (acres) ..	144,000	138,600	— 5,400 — 4	150,000	+ 11,400 + 8	
Mixed grain (acres)	191,000	272,000	+ 81,000 +42	255,000	— 17,000 — 6	
Potatoes (acres) ..	153,000	157,000	+ 4,000 + 3	188,000	+ 31,000 +20	

* Estimated

and decided on methods which should be taken to assure this production. For each crop a circular will be printed and distributed, through the agronomes and the local committees, to every farmer. These circulars will emphasize the need for more production and will suggest ways of getting it. As an example, the poultry committee plans to explain how production per hen can be increased and will suggest hatching more chicks this spring to provide more laying hens next fall. The emphasis in the grain-production plan will be on increasing yields per acre, by the use of good seed of proper varieties, sown at the right time in well prepared seed beds. Recommendations along the same lines will be made for all the other crops.

Throughout all the discussions ran the theme "how can all this be accomplished under the present conditions of labour, fertilizer and feed?" And it must be admitted that these are factors which will loom large during the coming season, and upon their solution will depend the success of the intensified production programme, not only in Quebec but in every other province. Farmers are being asked to do a little more with the labour they have and to hope that some formula will be worked out to provide them with much-needed assistance. The Quebec authorities are doing everything they can to get more labour; representations are being made to Ottawa for help, school boys and men not eligible for military service may be mobilized this summer. Whatever the outcome, the stark fact remains that our production must be stepped up, and the Department of Agriculture will leave nothing undone to see that it is.

Order Fertilizer Now to be Sure

The fire at the Canada Packers' plant a few weeks ago destroyed a quantity of chemical fertilizer sufficient to supply one-fifth of all fertilizer used in Quebec last year. Besides destroying this valuable material, the fire destroyed the warehouse, and this has seriously reduced the amount of storage space available in this province.

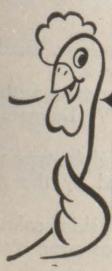
Unless fertilizer can be shipped out regularly by the distributors, there will not be enough space to store all the fertilizer which will be ordered this spring. Only by re-filling the available storage space several times will it be possible for the distributing companies to fill all their orders if everybody holds up his order until the last moment, or who orders early but does not ask for immediate delivery.

Transportation is another problem. Transportation conditions, if all the fertilizer for use this summer has to be delivered at the same time, will be such that an automatic rationing will probably come into being, for it will be impossible to move such a quantity in a short time. Even if that does not happen, deliveries are bound to be late.

Don't take a chance. Order at once, and ask for immediate delivery. This will assure that you will get your fertilizer, and that your neighbour will also get his.

P. D. McArthur Heads Dairy Farmers

At the Calgary meeting of the Dairy Farmers of Canada Mr. P. D. McArthur of Howick was elected President for the coming year. Vice-president is Mr. R. H. M. Bailey, Edmonton; Mr. J. J. McCague, Alliston, Ont. was elected second vice-president, and the directors will be: Ontario—H. S. Marjerison, J. J. Poole, Earl Kitchen, R. J. Scott, R. F. Lick, J. A. Huges. Quebec—P. D. McArthur, H. C. Bois, David Black, J. P. Beauchemin. New Brunswick—H. C. Greenlaw. Directors for Nova Scotia and Prince Edward Island will be elected at provincial meetings. The secretary-treasurer is again V. S. Milburn.



**Read why better
poultry feeds
contain**
"VIDOVA"

See Page 21

Varieties of Farm Crops Recommended by The Quebec Seed Board for 1943

The Quebec Seed Board publishes herewith the list of varieties of field crops which it recommends for 1943. In most cases the varieties which appear on the list have been thoroughly tested against many other available varieties and as the result of such comparisons have been chosen as being the most suitable for our conditions.

GRAIN CROPS

OATS:

Early Maturing:

Cartier—Very good quality, good yield.

Mabel—Very good quality, good yield, resistant to leaf rust.

Medium Maturing: (4 to 7 days later than the Early Group).

Erban—Good yield and quality, and resistant to leaf rust.

Vanguard—Good yield, resistant to stem rust.

Medium to late Maturing: (8 to 12 days later than the Early Group).

Banner—Good yield, generally adapted.

Lasalle—Very good quality, good yield. As it produces well even under hot dry conditions it is especially adapted in the general district of Montreal.

BARLEY:

Rough-Awned Varieties:

O.A.C. 21—Six-rowed, early, good yield, generally adapted and especially recommended for malting.

Pontiac—Six-rowed, about two days later than O.A.C. 21, good yield, good straw and generally adapted.

Smooth-Awned Varieties:

Byng—Six-rowed, early, excellent yield. (Not recommended on very rich soil where the crop is apt to lodge).

Velvet—Six-rowed, early and good yield.

WHEAT:

Coronation—Bearded, white-chaff, late maturing, good for breadmaking, resistant to stem rust.

Garnet—Beardless, very early maturing, and good for breadmaking.

BUCKWHEAT:

Japanese—Smooth hull, large seed with vigorous growth.

Rough-Hull—Very small seed, rough hull, suitable for feeding purposes only.

Silverhull—Smooth hull, small seed.

FIELD PEAS:

Arthur—Medium maturity, medium size, short straw, suitable for grain and for soup.

Chancellor—Early, small size, medium length of straw, suitable for grain, for O.P.V. mixtures, and for soup.

FIELD BEANS:

Improved Yellow Eye—Early, very large seed, with yellow eye. Suitable for table use where there is no objection to the yellow eye.

Navy—Early, white, large seed, suitable for table use.

Robust—Later, small seed, good yield, suitable for table use.

FIBRE FLAX:

Liral Dominion—A new variety developed in Northern Ireland which has given particularly fine results in Canada. The variety is tall and of a particularly vigorous habit.

Stormont Cirrus—Rather late, very long and strong straw, very good yield of fibre and a fair yield of seed. The quality and strength of straw place this variety among the best.

Stormont Gossamer—Late, long straw, rather weak. Good yield of fibre and very good yield of seed. The fibre is of good quality and this variety ranks with Cirrus as one of the best.

GRAIN MIXTURES

Under some conditions it may be desirable to grow mixtures of grain. When this is done it is important that the varieties used should ripen at the same time. They should be chosen from those that are recommended for the different districts.

EARLY MIXTURES

Cartier or Mabel Rate per acre
Any variety of barley on the recommended list 50 lbs.

MEDIUM MATURING MIXTURES

Erban or Vanguard	Rate per acre
Any varieties of barley on the recommended list	50 lbs.
	50 lbs.

MEDIUM TO LATE MATURING MIXTURES:

The later varieties of oats *Banner* and *Lasalle* may be mixed with any of the recommended barley varieties at the same rates as above, but as all of these ripen ahead of the oats there is a likelihood of considerable loss.

As the Seeds Act does not provide for seed grain mixtures, those recommended cannot be purchased. It is therefore necessary each year, to make up the mixture at home by using the proper varieties, proportions and rates.

CORN CROPS

ENSILAGE VARIETIES:

OPEN-POLLINATED:

Longfellow—An eight-row, yellow flint, early maturing.

Salzers (North-Dakota)—An eight-row, white flint, early maturing.

Golden Glow—A fourteen to sixteen-row yellow dent, medium maturing.

White Cap Yellow Dent—A fourteen to sixteen-row, white capped yellow dent, medium maturing.

Silver King (Wis. No. 7)—A fourteen to sixteen-row white dent, medium to late-maturing.

HYBRIDS—

Varietal Hybrid:

Algonquin—This is a varietal hybrid. The seed sold is a light yellow colour but the crop grown produces ears with a mixture of yellow and white kernels. The variety is very early maturing.

Double-Cross Hybrids:

Wis. No. 531—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is early maturing.

Wis. No. 606—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

Wis. No. 645—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

GRAIN VARIETIES:

Quebec No. 28—A twelve-row yellow flint, for grain only, early maturing.

ROOT CROPS

In the following list of root crop varieties, all of the swede and mangel sorts are registrable. The Board recommends the use of registered seed. Experience has shown clearly that ordinary commercial seed cannot be depended on for quality, uniformity or trueness to type. In contrast, the registered material is being constantly selected and is being grown and packaged under strict supervision. It therefore represents the highest grade of root seed available and, while it will cost more, the results will justify the extra expenditure.

SWEDES:

Acadia—A globe-type with purple skin colour. Bred and introduced by the Experimental Farm, Ottawa.

Ditmars Bronze-Top—A flat-globe to globe-type with green to bronze skin colour. Selected by Mr. R. V. Ditmars of Deep Brook, N.S.

Laurentian—Globe to slightly longer than globe-type with clear purple skin colour. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Wilhelmsburger—Globe-type, with green skin colour. Introduced from Europe. Recommended as possessing resistance to club-root.

MANGELS:

Frontenac:—Intermediate, of orange-yellow colour. High in yield and medium in dry matter. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Giant White Sugar:—Half-long, white, rather low in dry matter. Bred and introduced by Ralph Moore, Norwich, Ont.

Prince:—Half-long, white, low in dry matter, high gross yield. Selected by R. Moase, New Annan, P.E.I.

Tip-Top:—A short intermediate, of orange-yellow colour high in dry matter. Bred and introduced by the Experimental Farm, Ottawa.

CARROTS:

Giant White Belgian:—Very long type, slim, grows one-third out of ground.

White Intermediate:—Intermediate, grows entirely underground.

POTATOES:

Irish Cobbler:—White, good quality, especially suitable for an early crop.

Carmen No. 3:—White, good quality, suitable for main crop.

Green Mountain:—White, good quality, suitable for main crop, on light soils.

HAY AND PASTURE CROPS

RED CLOVER:

Dollard:—An early variety which is hardy, high yielding and disease resistant and which will produce two cuts per season. It has been selected from material grown at Macdonald College since 1911 and is well adapted to local conditions.

Ottawa:—An early variety which is hardy, a good yielder, hairy-stemmed, dark seeded and disease resistant and produces two cuts per season. It was developed by mass selection methods at the Central Experimental Farm, Ottawa.

ALFALFA:

1st Choice:—Registered Grimm.

2nd Choice:—Certified Grimm or Certified Ontario Variegated.

MIXTURES FOR HAY

Mixture "A"

For well-drained, non acid soils

	Rate per 100 lbs.
Timothy	50
Red Clover	20
Alsike Clover	5
Alfalfa	25

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

Mixture "B" (*)

For soils, not well-drained

	Rate per 100 lbs.
Timothy	55
Red Clover	30
Alsike Clover	15

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

(*) Add two pounds of Alfalfa per arpent where conditions appear satisfactory for a trial with this crop.

Before using any of the three following mixtures for pasture purposes, study carefully the recommendations of the Quebec Provincial Pasture Committee. These are available from any of the provincial agricultural offices.

Mixture "C" (*)

For soils inclined to be acid

	Rate per 100 lbs.
Timothy	47
Red Clover	20
Alsike Clover	13
Kentuck Blue	13
Red Top	7

Rate of Seeding:—12 lbs. per arpent
15 lbs. per acre

Mixture "D"

For well-drained, non acid soils

	Rate per 100 lbs.
Timothy	48
Red Clover	15
Alsike Clover	8
Alfalfa	16
Kentucky Blue	13

100 lbs.

Rate of Seeding:—13 lbs. per arpent

16 lbs. per acre

(*) Add one pound of Wild White Clover per acre where it does not volunteer readily from the soil.

LONG TERM MIXTURE (*)

	Rate per 100 lbs.
Timothy	35
Red Clover	20
Alsike Clover	10
Kentucky Blue	15
Red Top	15
Wild White Clover	5

100 lbs.

Rate of Seeding:—16 lbs. per arpent

20 lbs. per acre

(*) It is recommended to use this mixture with three bushels of oats per acre and to have it grazed the same year as soon and, as often as the oats reach a height of six inches. It should not be grazed too short during the first year, especially in September.

Poultry Day at Quebec

Encouraged by the success of the Montreal meetings, the Quebec Poultry Industry Committee staged another demonstration at the Chateau Frontenac at Quebec on January 28th. The programme followed substantially that of the Montreal meetings, with demonstrations for both producers and consumers, talks on poultry raising practices by recognized experts and a programme for consumers to show how to buy, prepare and serve poultry products.

The convention rooms were filled to capacity. About 2400 French-speaking and 250 English-speaking women attended the consumers' demonstrations, and more than 300 producers were on hand to pick up the latest information and see the exhibits of equipment set up by various manufacturers.

The organizers of the programme, which was planned to encourage the use of poultry meat and to emphasize its value as a substitute for other types of meat, are extremely pleased with the success of the demonstrations.

Tomato Cans for Sap

The shortage of sap pails has decided the Department of Agriculture to collect all the empty cans it can find and turn them over to those farmers who need them to collect sap this spring. Anything between half a gallon and three gallons will be used and the general public, hotel keepers and other are asked to save these cans which will be collected by the local agronomes.

Our sugar bushes may have a queer look this spring—there won't be any new and shiny buckets hanging on the trees—but as long as there is something that will hold sap we'll get a crop of syrup.

QUEBEC PROVINCIAL FERTILIZER BOARD

SUMMARY of recommendations for mixed fertilizers approved
for manufacture and sale in Quebec for 1943.

Formulae

0-14-7

or

0-16-6(*)

0-12-10

2-12-6

2-12-10

4-12-6

4-8-10

Recommended for

Rates for acre

CEREALS on loam soils where lodging is likely to occur	250 to 500 lbs.
	400 to 500 lbs.
PASTURES on loam soils, specially as fall applications	250 to 375 lbs.
	250 to 500 lbs.
ALFALFA MEADOWS on loam soils	250 to 375 lbs.
	250 to 500 lbs.
CEREALS on light soils well supplied with nitrogen	400 to 500 lbs.
	400 to 500 lbs.
PASTURES on light soils, specially as fall applications	250 to 375 lbs.
	250 to 375 lbs.
ALFALFA MEADOWS on light soils	250 to 375 lbs.
	300 to 500 lbs.
FIBRE FLAX where lodging is usual (or 0-14-7)	250 to 600 lbs.
	500 to 800 lbs.
CEREALS on loam soils	375 to 500 lbs.
	500 to 600 lbs.
EARLY SWEET CORN	250 to 375 lbs.
	300 to 500 lbs.
SILAGE CORN, SWEDES and MANGELS, on loam and clay soils	250 to 600 lbs.
	500 to 800 lbs.
PASTURES on heavy soils where wild clover is absent	375 to 500 lbs.
	500 to 600 lbs.
PERMANENT GRASS MEADOWS on loam and heavy soils as an alternative with 4-12-6	250 to 375 lbs.
	800 - 1500 lbs.
POTATOES on heavy soil after a crop of clover being worked into the soil	375 to 500 lbs.
	500 to 800 lbs.
TABLE STOCK SWEDES on heavy soils	250 to 400 lbs.
	500 to 600 lbs.
TOMATOES on heavy soils	250 to 375 lbs.
	300 to 500 lbs.
PEAS and STRING BEANS on heavy soils	250 to 375 lbs.
	300 to 500 lbs.
RASPBERRIES—with 8 to 10 tons of manure	250 to 375 lbs.
	300 to 500 lbs.
SAME CROPS on light soils as 2-12-6 on loam and clay soils and used in same quantities ONIONS on mineral soils, with manure	500 to 800 lbs.
	800 - 1200 lbs.
without manure	300 to 500 lbs.
	400 to 600 lbs.
FIBRE FLAX production (general recommendation)	875 - 1000 lbs.
	250 to 500 lbs.
FLUE-CURED TOBACCO (special brand)	250 to 250 lbs.
	150 lbs.
SUGAR BEETS on light soils, broadcast	400 to 500 lbs.
	400 to 600 lbs.
SUGAR BEETS on light soils, in row application	250 to 375 lbs.
	375 to 500 lbs.
If fertilizers placed in contact with the seed	250 to 250 lbs.
	150 lbs.
CEREALS on poor soils, specially low in nitrogen	400 to 500 lbs.
	400 to 600 lbs.
PERMANENT DEPLETED GRASS PASTURES	250 to 375 lbs.
	375 to 500 lbs.
OLD GRASS MEADOWS	250 to 375 lbs.
	375 to 500 lbs.
CORN, SWEDES and MANGELS, on very poor soils	800 - 1200 lbs.
	800 - 1200 lbs.
The 0-14-7 will replace 0-16-6 for the duration of the war. Will only be put on sale in 1943 the balance of the stock of 0-16-6 that was manufactured in 1942.	
POTATOES on old muck soils	800 - 1500 lbs.
	800 - 1200 lbs.
EARLY POTATOES with no manure	800 - 1200 lbs.
	800 - 1500 lbs.
LATE POTATOES where no manure is available and no clover has precedingly been worked into the soil	800 - 1200 lbs.
	800 - 1500 lbs.
EARLY CABBAGES and CAULIFLOWERS	500 lbs.
	1000 lbs.
LATE CABBAGES and CAULIFLOWERS	500 lbs.
	1000 lbs.
ASPARAGUS	600 to 800 lbs.
	500 to 800 lbs.
ORCHARDS, as an initial application in certain districts of the Province, (East of Hemmingford) 1 lb. per each inch of tree diameter.	375 to 500 lbs.
	600 to 800 lbs.
EARLY SWEET CORN without manure	600 to 800 lbs.
	500 to 800 lbs.
LEEKES on mineral soils	375 to 500 lbs.
	600 to 800 lbs.
CORN SILAGE, SWEDES and MANGELS on very poor soils where no manure is available	300 to 400 lbs.
	250 lbs.
FIBRE FLAX on soils very low in organic matter, (Special recommendation for Lower St. Lawrence district) without manure	600 to 800 lbs.
	600 to 800 lbs.
with a thin coat of well rotted manure	600 to 800 lbs.
	600 to 800 lbs.
STRAWBERRIES. After harvest	600 to 800 lbs.
	600 to 800 lbs.
RASPBERRIES. When no manure is available	600 to 800 lbs.
	600 to 800 lbs.

	MUCK SOIL CROPS		
2-8-16	CARROTS, BEETS, PARSNIPS	500 to 800 lbs.	
	ONIONS	800 - 1200 lbs.	
	LEEKES, POTATOES	1000 - 1500 lbs.	
	CELERY—immediate market use	800 - 1200 lbs.	
	keeping celery	1600 lbs. or more	
	SUGAR BEETS on loam and clay soils:		
2-16-6	applied broadcast	300 to 500 lbs.	
	in band application	250 lbs.	
	if fertilizer placed in contact with the seed	150 lbs.	
5-8-10	PIPE and CIGAR TOBACCO, small varieties	750 - 1000 lbs.	
9-5-7	large varieties	1000 - 1200 lbs.	
	ORCHARDS, 1 lb. per each inch of tree diameter.		

Fertilizer Prices and Bonuses for 1943

Prices of fertilizers and fertilizer mixtures have been set by Ottawa; they went into effect on January 1st, 1943 and are uniform for the whole province and for all distributors. They are as follows:

Superphosphate	20% P_2O_5	\$23.25
Ammonium sulphate	20% N	44.00
Ammonium nitrate	16% N	43.40
Sodium nitrate	16% N	52.50
"Stable-Phos"	20% P_2O_5	25.25
0-14-7		27.25
2-12-6		28.00
4-12-6		31.50
4-8-10		31.25
2-12-10		31.00
2-16-6		31.50
9-5-7		34.00
5-8-10 (for tobacco)		39.50
2-12-10 "		35.50
2-10-8 "		31.75

Sales are for cash, F.O.B. Montreal, Beloeil, Chamby, Quebec. Fertilizers are sold in 100 pound paper bags. Additional cost for special fertilizers are as follows: \$2.00 per ton for mixtures containing 2% of borax; \$1.00 per ton for those containing 1% magnesium; \$1.25 per ton for those delivered in jute bags, if they can be had and while the supply lasts.

Bonuses

Bonuses for the use of certain fertilizers and mixtures will be continued in 1943, provided the fertilizer is used only on the following crops: pastures, hay crops, corn for silage or grain, spring wheat, oats, buckwheat, peas, soybeans and mixed grains for cattle feed, mangles and turnips for feeding. The bonuses are:

0-14-7	\$3.15
0-12-10	3.30
2-12-6	3.30
2-12-10	3.90
4-12-6	3.90

Superphosphate	3.00
"Stable-Phos"	3.00
Sodium nitrate	4.80
Ammonium nitrate	4.80
Ammonium sulphate	6.00

Not more than \$24.00 will be paid in bonuses to any one purchaser of fertilizer during 1943. Fertilizers bought for use on any farm operated by a government, industrial firm, municipality or corporation, with the exception of religious and charitable institutions, may not be bonused.

How the bonus is calculated

The bonus is figured according to the amounts of the three ingredients, nitrogen (N), phosphorus (P) and potash (K) at the rate of 30 cents for each unit of N, 15 cents for each unit of P and 15 cents for each unit of K. For example, the bonus of \$3.30 on a ton of 2-12-6 is made up as follows:

2% N at 30c	.60
12% P at 15c	1.80
6% K at 15c	.90
<hr/> \$3.30	

Handle fertilizer carefully

The paper bags in which fertilizer is now packed are not as strong as the jute bags to which we have been accustomed. Be careful in handling them and don't throw them around as if they were so many blocks of wood. Don't pile too many on top of each other unless you want the bottom ones to split open.

Store the bags in the driest place you can find and raise the bottom layer off the floor a little way. Keep them from getting wet with rain or snow. Look them over now and then to make sure that the fertilizer is not beginning to harden. If it is, bounce the bag on the floor lightly; this will break up the crust that is beginning to form over the surface of the fertilizer. If this crust is allowed to continue forming the whole contents will in time become solid, and it will take precious hours next spring getting it into

shape for spreading. An ounce of prevention is worth a pound of cure.

Order Early

Finally, it cannot be emphasized too strongly that all purchasers of fertilizer for 1943 must get their orders in early and specify immediate delivery. The man who leaves his ordering until just before he wants to use it will likely be out of luck.

Apple Growers' Annual Meeting

The forty-ninth annual meeting of the Quebec Pomological Society was held in Montreal on January 21 and 22. Attendance was large, and would have been larger had the Ontario growers, many of whom attend this meeting, not chosen the same dates to meet in Toronto. The directors are to be congratulated on the interest which their association holds for its members an interest which proves that the Society is performing the function for which it was founded, the improvement of apple growing in this province.

In his presidential address Edgar B. Standish predicted large demands for apples in 1943 to replace the usual stocks of canned fruit which will not be available. Growers will be asked to produce more with less labour, machinery, fertilizer, spray material and containers. New equipment will be practically off the market, and present machinery must be put into condition immediately while spare parts can still be obtained. Reporting on the work of the Rougemont apple juice plant, he stated that about 70,000 gallons of juice had been pressed, which compared with 50,000 gallons in 1941 and 30,000 in 1940. The pack was put up in glass bottles and in drums with the exception of 7,000 cases of fortified juice packed by special permission in cans for the use of the armed forces. The experience of the juice plant has shown that McIntosh and Fameuse make the most popular juice.

The report of the Markets Committee of which Roswell Thomson is chairman, emphasized the value of the advertising campaigns planned and carried out by the Society, and gave cogent reasons why this feature of the activities of the Society should be continued. The outlook for 1943 is better than last year, since the California orange crop is a million boxes less and supplies of imported canned fruit are nearly gone. Prices should be higher than the average received in 1942, and all members should take every opportunity to reduce costs of production and get the largest possible yield. With many young orchards coming into full production we should plan now to market crops of over two million bushels.

New containers demonstrated

One feature which attracted much attention was a demonstration of cardboard containers to replace the familiar box which may be hard to get soon. One was a bushel box holding four smaller boxes in which the fruit is packed in waxed paper bags. Waxed linings used in these boxes improve the keeping quality of the contents. Though these are naturally not as strong as wooden boxes, they will make a satisfactory substitute nevertheless.

Fertilizer problems

The fertilizer situation is causing concern; there is no assurance that every order will be filled, according to a representative of the C.I.L. who was present. Delivery will be made if and when possible, and everyone was urged to order now for immediate delivery so that the plants would not be swamped later with orders which lack of transportation would make it impossible for them to deliver.

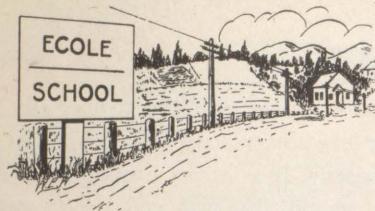
Donald Blair of the C.E.F. spoke on varieties suitable for Quebec, mentioning that McIntosh leads all others. He pointed out that it is unwise to depend on a single variety and suggested planting earlier and later maturing varieties to supplement the main one. We hope to publish his paper in full in a later edition.

H. Hill gave his usual recommendations on fertilizers, and still held to the belief that rate of growth and colour of leaves is the best guide for determining the fertilizer requirements of an orchard. Although preferring the use of separate ingredients, he admitted that due to shortage of labour most growers will use a ready-mixed formula, and stated that either 9-5-7 or 4-8-10 should prove satisfactory. Magnesium sulphate was recommended for districts where a lack of magnesium has been found, twelve pounds per tree where symptoms are severe. Applications of dolomitic limestone with the magnesium sulphate in the Frelingburg area should give more permanent effects. Boron treatments are indicated where cork disorders exist.

From the talks of Fred Brown and W. A. DeLong everyone was convinced that orchard land should have a certain amount of slope and drainage. Frost damage is heavier in pockets and on flat lands. Prof. Murray traced the progress of making apple juice in Quebec, pointing out that Quebec had packed the first apple juice fortified with vitamin C.

C. E. Petch assured the growers that a sufficient supply of the common spray materials is on hand and summarized the contents of the spray calendar prepared for distribution. According to Georges Maheux, needless time is lost combatting disease and insects when sanitation measures applied in time could have prevented their occurrence.

Edgar Standish was elected President for another year, and J. Ed. Duchesne and W. J. Tawse remain as Secretaries.



LIVING AND LEARNING



Education in Great Britain

by Miss Helen Beal

(English school teacher, in *Chicago Union Teacher*.)

In spite of tragedy and sacrifice, education, the shining lamp of free enlightenment, has been kept alight. This is a People's war and they must know the truth, while above all our whole future rests on the rising generation.

At the outset of war, schools in the dangerous areas were evacuated so that children could carry on their work undisturbed. Hence today nearly a million children are scattered over the countryside, living in school camps or with foster parents, and enjoying the best educational facilities we can offer. In some cases it has meant a two-shift system has had to be adopted to accommodate all the children designated for one school, but where the local children have their school buildings in the morning and evacuees with their staff in the afternoon, there is little loss of school hours, because of organized games and practical open air activities.

Standards Maintained

Our boys and girls in secondary schools work hard even under the handicap of lessened equipment and take examinations of pre-war standards. We remember that handicaps produce effort and effort produces character and moreover that a good teacher with a blackboard is more valuable than lots of fancy apparatus. Then while secondary schools must work with fewer text books and less equipment than usual, there is also the equally wholesome experience of cooperating for service and for sacrifice.

Teachers Deferred

Because of the importance attached to teaching, Britain has deferred men teachers over 35 from military service and required all women teachers to remain within the profession. Thus we shall keep our trained women for the best work they can render their country — that of training the citizens of tomorrow. For, after all, the best peace we can make will never work unless we have a generation following us that can work out aspirations and achievements. Moreover it is obvious that the welfare and happiness of the children depend largely upon the devotion and skill of the teachers — teachers who, in the main, are not confining their efforts solely to their professional tasks.

Of the depleted staffs that remain in the schools, large numbers of the men are giving their time to the Home Guard, while many others — women as well as men — are serving in various branches of Civil Defense. Indeed, in many districts it is the rule rather than the exception to find every teacher, whether man or woman, engaged in one or more activities in his spare time outside his normal work. One of the greatest services which the teachers have rendered to the country has been the part which they have played and are playing in the evacuation scheme.

Priorities for Education

The great need of today, apart from the immediate task of winning the war, is social education, an understanding of the ultimate ends of life, a discriminating sense of values, a knowledge of the dynamics which control human behaviour, a careful judgment of the dangers to be avoided in all planning for security, a moral passion to create a juster and more efficient world. There is an imperative need of priorities for education, provided education is real and vitally related to the problems which will soon be upon us — if they are not upon us already.

—Food for Thought.

YOUTH COUNCILS ENCOURAGED

Youth Councils Encouraged

The Government has given all-out assistance to the youth organizations catering for the physical culture and recreation of young people from fourteen to twenty, realizing the value of such centres, particularly in winter "blackout". That means a council of youth services has been organized in almost every town, consisting of representatives from youth groups like the scouts, Y.M.C.A. and Y.W.C.A. and so on, so that there can be full collaboration in the sharing of equipment, buildings, arranging tournaments, and in so organizing together that all areas and classes of youth shall be cared for.

Education not a Casualty

EDUCATION NOT A CASUALTY

In Britain, Education has not become a casualty of war. In fact, the war has given opportunity for valuable experiment in making education less academic and more practical and above all it has introduced a real spirit of cooperation and citizenship. It has provided the basic principle on which true democracy is founded — that of responsibility. As we all know, true freedom and liberty carry the corresponding duty of responsibility. The Britain of the future, as a democratic country, will be based on that healthy spirit of cooperation and service. Children will continue to serve their community, youth organizations will continue on a large scale and the voluntary part of civil defense will be diverted into new channels. While Britain has lost much materially, she has gained spiritually. She has at best tasted the purer joy of living born of cooperation and service.

BACON AND BRAINS

The Dominion of Canada is asking farmers for more bacon and eggs next year — for its armed forces, allies and consumers on the home front. Not only are they asking for more bacon and eggs, but also more beef, mutton, mixed grains, hay, butter, flax and sugar beets (Quebec's 950 acres of sugar beets in 1942 is to be increased to 10,000 acres in 1943). Sugar beets are more spectacular than the rest, but if the production goals are regarded as a whole, the 1943 food program in this province will be terrific.

A conference was called at Quebec recently by the Department of Agriculture, to discuss *if* and *how* these goals might be reached. Details of the meeting will be found on page 22.

The farmers worked hard last year,—longer and harder than some of them should have worked. Last year's goals seemed to reach the ceiling of human effort. How can 1943 goals be achieved? Doubtless many useful tips, and much advice will come from various government agencies in the next few weeks. To these we would add our own thought on the matter.

Brains will bring home the bacon!

This is not a flippant remark but a profound belief in the power of the human mind and spirit to master colossal tasks.

Consider this task — of delivering new increased quotas of bacon or whatever commodity is your concern.

The experts can and must provide much of the leadership. They must discover: how to communicate the best production methods to farmers (a bulletin is of little value if the farmer never gets it or does not understand it); how to let each farmer know what is expected of him; where to find machines and men for agriculture; how to allocate machines and men where they will do the most good; how to keep up the supply, in spite of bottlenecks in materials and transportation: of commercial fertilizers, mixed feed ingredients, and insecticides.

The farmers have a problem, and this will take brain work. They must discover new approaches to farm production. They can take action in a hundred ways that never occur to the expert. The basic problem is planning together.

The Farm Forums in their discussion last fall agreed that there were enough men and machines in their localities to look after production if these were properly pooled. (With the exception of the management of dairy herds which presented special problems).

Rural Neighbourhoods Can:

1. See that all available machinery is repaired and in running order before spring. One person can order repairs for all, and if no blacksmith or garagemen and their shops are available, the handy men must band together to do the repairing.

2. A study should be made of the requirement of the neighbourhood for machinery to discover how it can be kept working to capacity. If a farmer cannot use his equipment through the season the war emergency surely requires that it be available to farms less fortunate where it would be used.

3. The manpower needs of the neighbourhood should be matched with the manpower supply. The manpower needs must be seen in terms of what the government wants from the neighbourhood.

4. If the manpower supply is inadequate two solutions are possible. a) to see how the manpower available can be shared through sharing work. One man who operates 600 acres has to harvest one field at a time. Three farmers with 200 acres each can surely manage as well. b) to get labour from outside, from high schools and universities or through National Selective Service, which has promised aid. Such extra labor might be pooled and used as needed by the neighbourhood. This pooling would be practical if Japanese or Italian labour were used.

5. Keep in touch with agencies such as National Selective Service. Someone in the neighbourhood should be appointed to do this. It is almost a full time job keeping abreast of new regulations anyhow.

The above suggestions most of which originated with Farm Forums, could be taken up by neighbourhoods. A Farm Forum may be the ideal unit for such efforts. Many ideas will emerge as the people put their brains to work, and these should be passed on to the Quebec Farm Forum office to be spread to other groups.

FARM FORUM SAYINGS

SHERBROOKE COUNTY: Eaton Road Forum — Every meeting grows more interesting and the members take such an active part. It is a pleasure to be secretary of such a group. *Mrs. Gordon A. Robinson, Secretary.*

BROME COUNTY: Creek Forum—A card party for Russian Relief will be held on January 29th. *George A. Allen, Secretary.*

COMPTON COUNTY: Parker Hill Forum—We haven't even a doctor here but we have two undertakers so we can die anytime. There are about three doctors in the county. We favor a Federal Health system. *Gladys Montgomery, Secretary.*

PONTIAC COUNTY: Quyon Forum—A plan for a municipal doctor system with service for everyone would be a great benefit to this community as we are about forty miles from a good hospital, with poor transportation facilities in winter. *Gervais O'Reilly, Secretary.*

SHEFFORD COUNTY: South Roxton Forum—The local English school is only visited every third year by the

health unit. This Forum would like to know the reason why we have to buy flour with our bran and shorts.

Mrs. O. W. Blampin, Secretary.

COMPTON COUNTY: Hardwood Flats Forum—In Compton we have a Health Unit, no hospital facilities, few doctors (four surrounding villages have no doctor). Two other towns have doctors too old to travel in winter.

J. P. Harrison, Secretary.

RICHMOND COUNTY: Spooner Pond Group No. 1—

We were fortunate in having with us last night Dr. Roger Nadeau of the personnel of the County Health Unit. He explained all the advantages of a Health Unit, and explained in a general way all the work that is carried on by the specialists, doctors, nurses and inspectors. We learned of many advantages that a Health Unit has to offer.

Possibly some other Farm Forums could ask a doctor from their County Unit to come to one of their meetings to speak to them.

R. E. Lampron, Secretary.

CHATEAUGUAY COUNTY: Chateauguay South-East Forum—We suggest a joint meeting of several forums and have a speaker address the meeting on Credit Union Organization, preferably a speaker from a district where there is a successful working credit union. We need a lot of education before organization.

J. M. Winter, Secretary.

COMPTON COUNTY: Grovehill Forum—Our group came to the conclusion that I should go to Mrs. Mabel Waldron, Chairman of the Sawyerville Community School and see if it is possible to get a speaker, on the establishment of credit unions, at the community school which covers four forums in this community.

Gleason Lake, Secretary.

FERTILIZERS . . . (from page 18)

result in a reduction in food stocks. As a result, similar grades of fertilizers will not cost any more—in fact in some sections the price will be less since, as far as possible, a common ceiling price has been agreed upon for eastern Canada. Thus in still another case, the cost of living is being stabilized by artificial control.

4. Reducing Cost of Distribution

The ordinary peacetime market is a strictly competitive one. Fertilizer manufacturers sell their product wherever they can find a market. This inevitably results in a good deal of overlapping with one producer shipping his product into the very district where another manufacturer is making the same material. With the various formulae standardized and controlled as they are, this is not only unnecessary but a very wasteful practice and one which unduly increases the rail load. With the full cooperation of the fertilizer companies, steps are being taken to overcome this situation and the 1943 distribution will, in effect, be largely zoned with a saving effected all around.

5. Uses—Essential and Non-Essential

A clear distinction has been established between essential and non-essential uses. Fertilizers are to be conserved, as completely as possible, for the production of food plants or those which serve some essential war purpose, e.g. fibre flax and oil. Following the determination of supplies and formulae available, the provincial or regional committees have prepared a complete statement showing the recommended uses. These are available through the various agricultural offices and should be studied carefully.

PARENTS AND CHILDREN

by Mary Avison

This column will welcome comments or questions it deals with, or on others that arise in every normal home.

APPRECIATION

"I met Mrs. S—— to-day with her baby," said my daughter, "and oh! it's homely!" Then she added confidentially; "We're lucky, aren't we, Mummy? Our babies are much better-looking than most babies, aren't they?" I laughed, but knew how she felt. Don't we all feel like that about our children! And isn't it lucky that we do. You have often heard someone say, "She's so plain that I can't imagine why anyone married her". But someone did, and probably he didn't think her plain at all. What a blessing it is we don't all see alike and that for each one of us somewhere there are eyes to see the beauty that others miss.

We all need to be appreciated. We all need someone to whom our faults, our weaknesses, our blemishes, are less significant than our bright moments, our strength, our greatness. Children need this kind of support more than older people. They need the encouragement of eyes that

see and voices that speak not of their faults but of their virtues.

Praise is so much more creative than criticism. Appreciation that is sincere may make permanent in a child some good deed or quality which was only in the experimental stage. Billy carries an elderly lady's parcel and someone notices and remarks on his helpfulness or thoughtfulness. Billy looks for other opportunities to help. Susie cobbles together a hole in a stocking that ordinarily Mother would have had to darn. Instead of criticising the darning, Mother is glad she did it for herself and says the 'darn' is pretty good for a little girl. So she tries again and does better.

That is what homes are for, to help us grow in grace, because in a home we see each other with eyes of love. "Aren't we lucky Mummy?" Yes, she is. Each child that is born into a home built on love is lucky, because there are those who, though knowing that others think the same of their baby, still feel "Our baby is lovelier than others, isn't he Mother?"



THE COLLEGE PAGE

THE MACDONALD CLAN

Notes and news of graduates and former students



The University of Montreal has conferred the honorary degree of Docteur en Pedagogie (D.Paed). on Dean Sinclair Laird, for many years head of the School for Teachers at Macdonald College.

This honour is the culmination of many years of untiring and unselfish devotion to the progress of education in this province and all Dean Laird's many friends join in extending their congratulations on the occasion of this public recognition of his services to the teaching profession.

Founder's Day at Macdonald

The annual celebration of Founder's Day on February 10th came just in time this year to take the minds of the students off the examination results which had just been posted. A dinner for all students was held in the College dining room at which Principal James brought a message to the student body, and this was followed by a concert in the Assembly Hall by the Montreal Masonic Choir under the direction of Mr. Walter Clapperton. Miss Doris Killam assisted at the piano, Buddy Payne of radio fame presided at the organ, and featured soloists were Miss Ella Clapperton, soprano, Miss Sona Pecmanova, violinist, and

Mr. Harry Maude, baritone.

The choir was in its usual good form and the concert was thoroughly enjoyed by all the large audience.

THE FOUNDER . . . (continued from page 1)

Later, in collaboration with James W. Robertson, there were begun those enterprises in educational reform which embraced the founding of the Canadian Seed Grower's Association, the Seed Branch of the Department, the establishment of the Macdonald Institute in the Ontario Agriculture College, the consolidation of rural schools in all the eastern provinces, the introduction of manual training, household science and school gardening into the schools and, as a culminating event, the foundation of Macdonald College as a part of McGill University.

When in 1898 he reluctantly accepted knighthood, Mr. McDonald altered the spelling of his name to *Macdonald* and this form was adopted in the title of the College, which annually honors his memory on the anniversary of his birth, February tenth.

In the eyes of those contemporaries who know little of the reserved and proud, though modest, merchant, Sir William appeared as a hard man — probably on account of his shrewd, close bargaining and his resolute refusal of appeals from religious bodies, — but he was actually most courteous, kindly and humorous. Prof. Percy Nobbs who, as architect of at least one of his buildings, came into close contact with him in the days of his munificence to McGill, describes him as a "kind, a very enthusiastic, a very punctilious and a very modest old gentlemen", and the chief stimulus for his generosity was not merely "the good of Canada" but the "simple and sympathetic affection, strongly felt, for all young men entering the battle of life with serious intent." Mrs. Walter Vaughan, who was warden of the Royal Victoria College, pictures him as "a punctiliously neat, polite, quiet-mannered man, animated by a fine democratic friendliness, which included in its circle not only statesmen and financiers but also women and children, to whom his gentle manner and his sense of fun endeared him."

In celebrating his birthday, the students of the College and the farmers of the Province are honoring the memory of a charming and warm-hearted, as well as a generous friend.



If you MARRY if you MOVE you MUST REPORT

IN THE obtaining of the marriage license . . . the rush of preparation . . . the celebration of the marriage . . . do not forget that you are required by law to notify the National Registration authorities about the happy event.

The bride changes her name . . . often both the bride and the groom change their address. Also, when any registered person moves at any time from one address to another, he or she is required by law to notify the National Registration authorities about the new address.

You MUST REGISTER ON, OR IMMEDIATELY AFTER YOUR 16th BIRTHDAY

THIS is to remind you that within thirty days after attaining your sixteenth birthday you are required by law to attend at any Post Office in Canada and obtain from the Postmaster your National Registration Certificate.

If you have reached your sixteenth birthday, and, by chance, have not registered, you should do so at once. If you change your address after registering, you must report the change on a card available at any Post Office.

It is a patriotic duty to comply with the National Registration regulations. You will avoid substantial penalties by doing so.

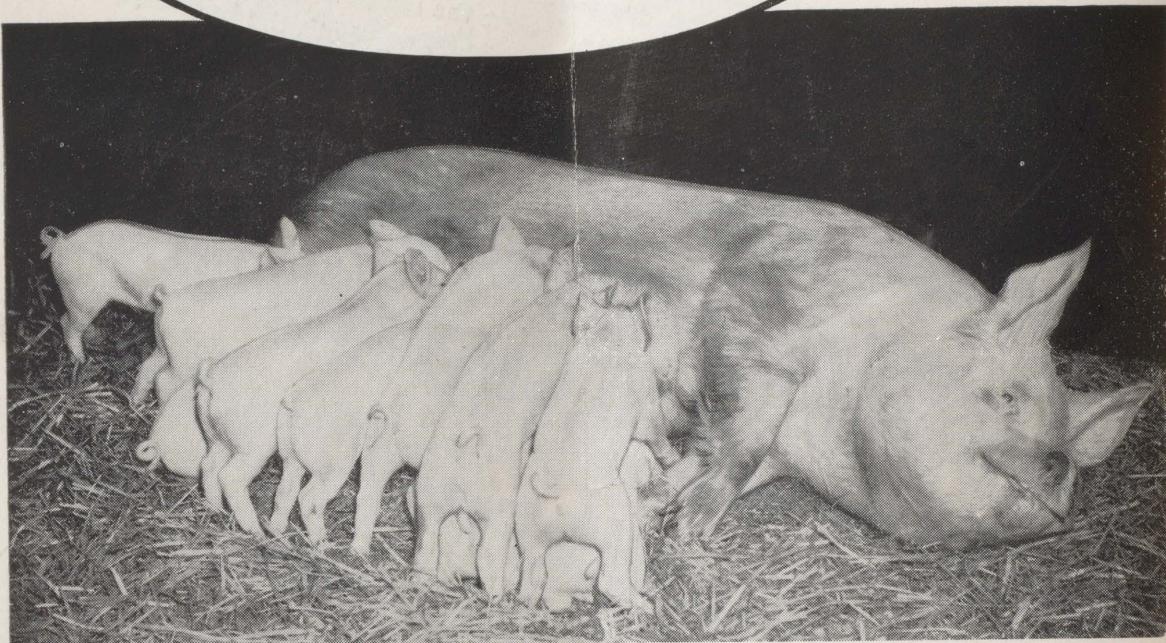
Every person, so registered, who afterwards marries or changes his or her address must report within 14 days to the Chief Registrar for Canada.

All registered persons are required by law to have their registration certificates in their immediate possession *at all times*. You may be required to produce your registration certificate, by the proper authorities, at any time.

Every duly registered person whose registration certificate has been lost, destroyed, worn out or defaced, should obtain a duplicate certificate. (Necessary forms and instructions for this purpose may be obtained from any Postmaster in Canada).

HUMPHREY MITCHELL
Minister of Labour, Ottawa, Canada

STOP THE LOSS OF YOUNG PIGS



—add a million pigs to this year's supply by preventing losses

A MILLION EXTRA PIGS CAN BE SAVED IF EVERY FARMER WILL GIVE:

- 1. ADEQUATE CARE AND PROPER FEEDING TO THE PREGNANT SOW.**
- 2. EXTRA ATTENTION TO THE NURSING SOW.**
- 3. SPECIAL ATTENTION TO THE YOUNG PIGS.**

The pregnant sow should get proteins, minerals and vitamins and, in most districts, should be given potassium iodide to assure strong healthy pigs. She should be provided with a clean, warm, dry, airy but draft free farrowing pen equipped with strong guard rails.

The nursing sow should be fed carefully and given feeds, such as skim milk or other protein supplement, minerals and vitamins which will assure plenty of milk of the right quality for rapid growth.

The nursing pigs must be fed iron in some form — sods, reduced iron, or iron sulphate (cooperas). Secure your supply now and start using it a day or two after the pigs are born.

REMEMBER

**EACH LITTLE PIG GROWN TO 200 LB. SUPPLIES THE BACON
RATION FOR NINE BRITISH PEOPLE FOR A WHOLE YEAR.**

For further information consult your Provincial Department of Agriculture, Agricultural College, nearest Dominion Experimental Farm or Live Stock Office of The Dominion Department of Agriculture.

175S

**AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa
Honourable James G. Gardiner, Minister**